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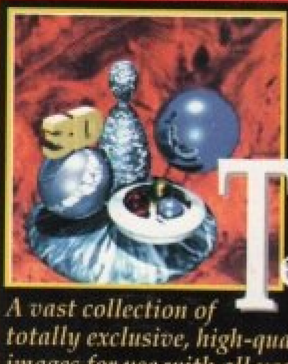
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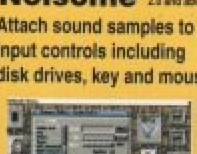
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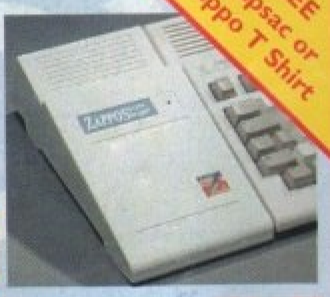


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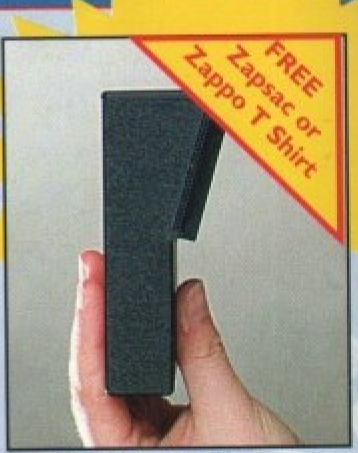


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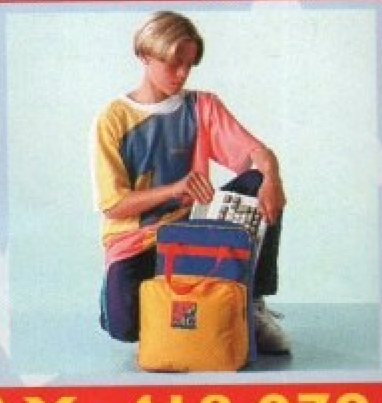
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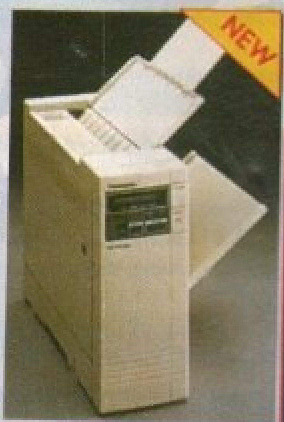
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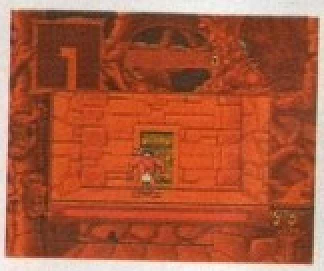
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### The essential guide to Amiga gaming











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## REVIEWS



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See page 31

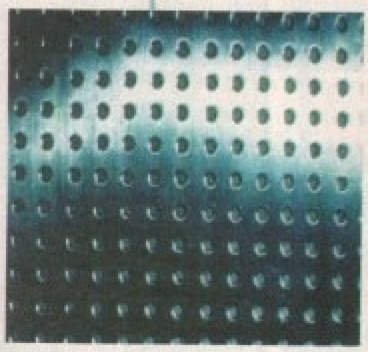
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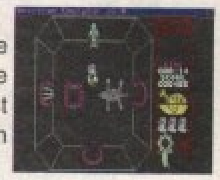
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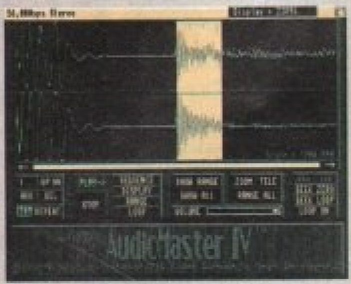
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Megalosound is the new 8-bit, stereo, direct-to-disk sampler package; the software is packed full of easy-to-use editing features, special effects and extras such as the ability to print waveforms and sample information.

The package allows sampling up to 84KHz mono and 56KHz stereo to memory and up to 21KHz stereo to hard disk on an A1200. Supplied with a hardware volume control and an extensive 144-page manual, Megalosound is impressive value and Gold-rated by CU Amiga, with 89% from everybody's favourite magazine, Amiga Format!

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AudioMaster IVis compatible with Megalosound and any other sound sampling hardware that connects through the Amiga's parallel port. Please call for further information.

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The best-value real-time video digitiser you can buy; VideoMaster gives you the ability to record real-time monochrome video with sound at 25 frames per second as well as quality full-screen stills from your camcorder or video recorder. VideoMaster RGB includes our new colour splitter, ColourMaster, and produces amazing quality colour stills.

VideoMaster AGA works on the A1200 and A600, connects via the PCMCIA slot for extra speed and freedom to use other peripherals, allows high quality stereo sound and supports HAM6 and HAM8 up to 640 x 512 resolution for stills.

### ColourMaster

ColourMaster is a new electronic colour splitter which works in conjunction with VideoMaster for stunning colour stills.

### VideoStage Pro

Spectacular video and on-screen interactive productions are easily created with this brand-new release from Oxxi. Shows can incorporate text, graphic objects, animated sequences and sound.

The *Storyboard* features icons for insertion of show events such as graphic images, title screens, sound events, ARexx calls, genlock events and play loop events; a *Timeline* allows different tracks for each of these.

Videostage Pro supports the concept of *Actors* allowing animation of any drawn object, button or brush and actors may be overlapped in their motion so that multiple objects move at the same time, for smoothness.

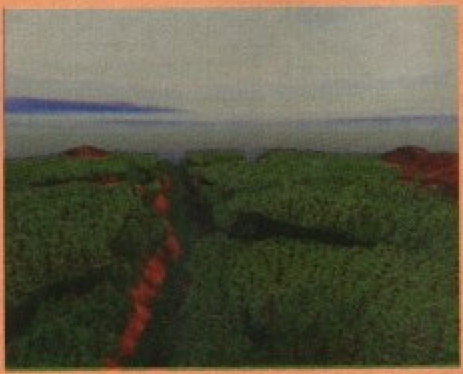
The *Genlock* control supports G-Lock and SuperGen genlocks as well as all generic Amiga genlock controls. *Sound* support for 8SVX samples and NoiseTracker, ProTracker and SoundTracker music modules.

Over 60 built-in dazzling *Special Effects* with wipes, fades, scrolls, cross-fades etc.

Videostage Pro requires an Amiga with a hard disk and 3Mb RAM (at least 1Mb chip RAM). AmigaDOS 2.0 or higher.

## Graphic Design

### VistaLite 3.0



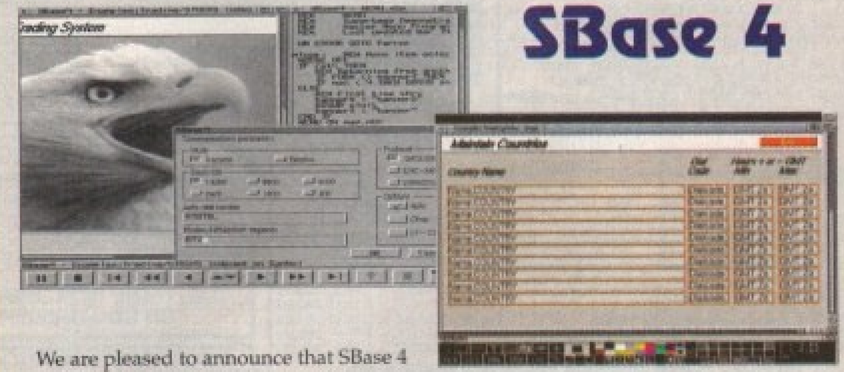
Create stunning landscapes with this amazing 3D simulation program. Supports HAM8 and 256 colour mode and requires 2Mb of RAM and Workbench 2.0 or above. A simply superb product from Virtual Reality Labs!

### Distant Suns 5.0

Be the star of your own trek through space! Animate the solar system, view the same night sky as the 3 wise men and navigate by the stars with this 3D Desktop Planetarium. Requires 2Mb RAM and Workbench 2.04 or greater.

## Business Applications

### SBase 4



We are pleased to announce that SBase 4 is back in the UK with Digital Direct. SBase 4 Personal and SBase 4 Professional are up to version 1.3n now and we have both in stock, ready for immediate despatch.

These products are renowned for their power and their range of features and have been available on the Amiga platform for many years in earlier versions. Now they have both been brought right up-to-date with support for the very latest Amiga computers.

Both SBase Personal and Professional are full-featured, fully relational and powerful databases with pull-down menus, multiple windows and complete access to your Amiga's multi-tasking environment and they are now compatible with AmigaDOS 3.0 and the AGA chip set.

SBase Professional includes a powerful database management language and supports ARexx. Please call for our datasheets on these superb products.

## Pricing & Ordering Details

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| TurboText | £39 | Distant Suns 5.0 | £29 |
| VideoMaster A500/A500+ | £39 | SBase Personal 1.3n | £69 |
| VideoMaster A600/A1200 | £59 | SBase Professional 1.3n | £139 |
| ColourMaster with VideoMaster | £35 | Remainders | |
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Simply call 0525 718271 from 9am to 6pm, Monday to Friday, armed with your credit or debit card number and we will despatch your goods within 3 working days, assuming they are in stock. If there should be any delay we will notify you immediately. Alternatively you can send us a cheque or PO made out to Digital Direct. Please add £3 postage within the UK (£6 for a next working day delivery), £4 within the rest of Europe, £8 elsewhere .

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*Digital Direct is the direct sales division of HiSoft UK.*

By ADAM PHILLIPS

# Commodore's creditors gather to do battle

NASSAU, Bahamas, July 19 – Le Meridien, a graceful resort hotel on fashionable Cable Beach, hardly seems a spot for a fight. It is a place of manicured lawns, swaying palms, sandy beaches and emerald water. Travellers normally come here for the relaxing pleasure of the tropics and fine dining at the hotel's gourmet restaurant.

But suddenly on Friday, amidst the usual gathering of sun-tanned women in bikinis and men in shorts, appeared a small army of two dozen lawyers, mostly men in dark suits bearing overstuffed briefcases.

They came to do battle over the carcass of Commodore International Ltd, the once mighty maker of small computers which had its North American headquarters in West Chester. They came for the first official meeting of Commodore's Bahamian committee of creditors.

It is a fight over the company's assets, over the future of its technology, over how much of its $145 million debt will be paid and, not surprisingly when lawyers get together, over legal jurisdiction.

Commodore, whose stock was traded on the New York Stock Exchange until May, was registered in the Bahamas, and the company initiated its own liquidation in the Bahamian Supreme Court.

The court-appointed Bahamian liquidators so far have received at least four proposals to buy Commodore, including one from the management team, its subsidiary in the UK, the only one of the company's units still profitable when the firm went out of business.

The other suitors are Amstrad Plc, a UK computer firm; Philips Electronics of the Netherlands, and Samsung Electronics of Korea.

But before there is a sale, lawyers for Commodore's principal creditors would like to have the bankruptcy proceedings moved, or at least have parallel proceedings opened in the US Bankruptcy Court in New York.

"The biggest problem we are having is that the Americans don't trust the Bahamians to do the liquidation," said Paul L Adderly, the attorney for the two liquidators.

"What can you do about that?" asked Adderly in exasperation. "We are not entirely ignorant of these matters in the Bahamas."

But lawyers for the main creditors see things differently. It is not just the competence of the Bahamians they have called into question, but the efficacy of Bahamian law.

Under Bahamian law, a creditor's committee has an advisory role while under US law, the creditors would have more of a say over final disposition of the assets.

Also, Bahamian law permits the liquidators to go back and judge, and possibly reverse, management actions involving assets three months before bankruptcy was declared. American law permits a year.

So far, the Bahamian court has rejected motions from the creditors to have the proceedings moved to New York.

Meanwhile, the creditors are seeking a ruling in US Bankruptcy Court in the Southern District of New York to seize jurisdiction or at least open parallel proceedings.

The principal opposing creditors are Prudential Insurance Co. of America and a subsidiary, Pruco Life Insurance Co, both of Newark, NJ, which are owed a total of $28 million; Anchor National Life Insurance Co of Los Angeles, owed $6 million, and Daewoo Telecom and Daewoo Corp of Korea, owed $15 million.

The creditors have questions about actions taken by the Commodore management team shortly before and right after the liquidation filing in the Bahamas on May 2.

They want to challenge management's transfer of a Commodore unit from one subsidiary to another, and they have questions about the conduct of Commodore's former president, Medhi R Ali.



Medhi Ali: Questions about conduct

Ali tried to get Prudential and Daewoo to agree to allow liquidation proceedings to go unchallenged in the Bahamas, in return for a vague promise that they would get 50 cents on every dollar of debt.

According to an affidavit filed in the Bahamian Supreme Court by Stephen M Richmond, an attorney representing the creditor's committee, Ali claimed he had a foreign buyer for the company and the sale would proceed quickly if there was not a legal tangle in New York.

Richmond, a gruff Boston-based lawyer, said that Ali refused to tell him who the potential purchaser was or what the terms of the sale were.

Ali is no longer associated with Commodore. Reached Monday by telephone at his home in Ridgefield, Connecticut, and asked for comment, Ali shouted, "You're intruding on my home. I'll complain to your editor. You're an idiot." He then hung up.

The Bahamian court-appointed liquidators are Franklyn Wilson and McGregor Robertson, two partners in the Bahamian offices of Delotte & Touche, a major accounting firm.

Wilson said on Monday he hoped to complete the sale of Commodore's assets "very quickly", but he declined to be more specific.

Amid all the men in dark suits last week was a bearded, casually dressed British national, David Pleasance, managing director of Commodore's UK subsidiary and a leader of the management team trying to buy all of the company.

"We might as well try. We have a good business in the UK, a very good business," said Pleasance, who came to the Bahamas to get to know the company's major creditors.

If the management buyout is successful, Pleasance said operations would be moved to England, but that the company would like to keep research and development facilities in Norrlstown.

"These are very good people, " Pleasance said. "We would like to keep them."

● *This text was reprinted with kind permission from Dan Stets, its writer, and the Philadelphia Inquirer.*

# NEWS BRIEFS

## FAST retirement

The Federation Against Software Theft has announced that its chief executive, Bob Hay, is retiring after nine years of service. He leaves to spend time with his wife who has been seriously ill over the last several months.

David Svendsen, board chairman of FAST and managing director of Microsoft Ltd, added," To many in our industry, Bob has been the public face of FAST and everyone will miss his single-minded goal of establishing a moral and legal environment in which to use software."

Svendsen concluded by saying: " Under his leadership, Bob has taken FAST from inception to the most successful anti-piracy body in the world."

## Health concern

For those computer users who regularly spend hours on the keyboard staring at a screen, the London Advice Services have released a factsheet on health and safety when operating a computer.

The Computanews pamphlet offers advice on what the risks are, what the user needs to do to create a better environment and what the laws say concerning employers responsibility to its staff.

The factsheet costs £3 and is available from LASA on 071-377 1226.

## Full house

After the somewhat troubled start of the European Leisure Software Publishers Association's [ELSPA] ratings system, the group has announced that all 63 members of the association have given their full support and adopted the scheme.

This includes Acclaim, publishers of the controversial Mortal Kombat, who, after much publicised deliberation, have agreed to carry the ELSPA age suitability ratings.

## Robotics report

According to research company Dataquest, US Robotics is now UK market leader in high speed modems, with a 16.5% share.

"We have gone from 15th in 1990 to number one in 1993. The figures tell their own story." commented US Robotics managing director, Clive Hudson.

For more details on US Robotics modems, call Lucy Brown on 0753 811180.

# New bidders step forward

After the surprise announcement last month that various members from Commodore were attempting their own buyout, a rumour has surfaced that Steve Franklin, former managing director of Commodore UK, is also making a bid for the company.

Franklin declined to comment on the situation. David Pleasance, the current UK managing director, thinks "it's highly unlikely" that the former head is in a position to offer a substantial bid.

Pleasance's own plans are apparently moving forward and he hopes that the question of Commodore's future will be resolved "in the next two to three weeks." He believes that their offer is the highest and feels confident of a successful result.

According to an article in the Chicago Tribune, both Amstrad and Philips have lost interest in a buyout, partly down to the legal delays. Samsung is interested in the intellectual-property rights of Commodore's products, but is dismissive with the computer firm's inventory or other products.

A potential buyer has appeared in the shape of Creative Equipment International based in Miami, who are in the process of submitting a bid. "There is a pent-up demand for the product," CEI president Alex Amor commented. " I think it can be very successful if it is brought back to the market."

The legal tanglings over the liquidation though are causing serious concerns with people close to Commodore. "The urgency arises because we are dealing with an asset which is perishable," said Franklyn Wilson, a liquidator in Bahamas.

"It is an industry where change is the greatest constant. This technology needs to be constantly updated to stay current."

# Raptor increases in power and speed

With the reputation of Raptor's quality and results, makers of the graphics work stations, Desk Station, have released two new models. The Raptor II and the Raptor Plus are seen by many as the next step for serious graphic artists and television production.

The Raptor Plus features MIPS RISC R4600/133MHz rendering engine that the company claims increases the rendering performance by 50 per cent over the original work station.

The Raptor range is available to buy through Ramiga International who can be contacted on 0782 398840.



Raptor Plus: Twice the speed of the original graphics work station



Primera Pro: Offering the latest in printer technology

# Printer paradise

Announced at the recent MACWORLD Expo in Boston, the new PrimeraPro colour printer is a high spec, low-priced machine that is compatible with the Amiga.

Featuring dye-simulation and wax thermal output at 600*300 dpi, Fargo – the company behind the new hardware – claim that the printer is the first in its kind to offer such a high dpi.

Costing $1895 in the States, the PrimeraPro can also print on a variety of different surfaces, from laser paper and transparency film to dye-sublimation media and T-shirt transfer paper.

*Amiga Computing* will be reviewing the product next month and Fargo, the makers of the Primera Pro, can be contacted on (612) 941 9470.



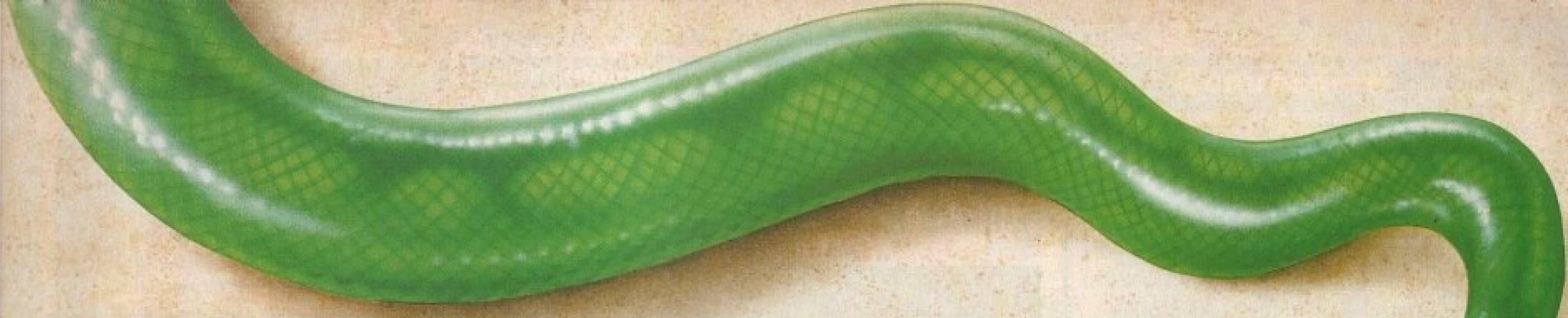
Competition: One of the many entries already received

# Competition boasts hologram prize

In a bid to show PC users and high-priced platforms what the Amiga is capable of, the 24 Bit Club has launched a competition for Commodore owners to send in their best 3D work. There are three categories for entry – science fiction/fantasy, photo realism and organic/abstract.

The winner from each will have their rendered masterpieces turned into a hologram by Munday Spacial Imaging, and most entries will find their way on to a video to be produced by the 24 Bit Club of the best work they receive.

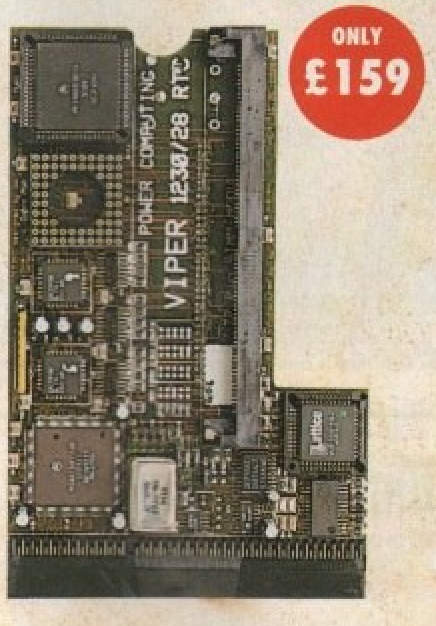
For more information and an entry form, phone John Campbell on 041-946 2191.



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The XL Drive can be used with any Amiga Computer, and allows you to store a massive 1.76MB on a high density disk. The drive also acts as a standard 880K drive and can read and write A4000 high density disks.

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We use the same drive mechanisms as Commodore.

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| Blitz Compatible | ● | |
| Disk drive modification by Sony to stop flickering LED | ● | |

Beware, flickering LED's on your disk drive mean that the drive has not been modified by Sony for 100% Amiga compatibility.

All prices include VAT and are subject to change without notice. Prices correct for month of publication only. Delivery extra. E & OE.


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# Amiga designer passes away

With the future of Amiga in doubt, its original creator, Jay Miner, passed away on June 20 in California. His lifelong kidney problems finally took his life.

Seen as the Father of the Amiga, Jay had a long and accomplished career – he helped design the Atari VCS games console and was an integral member of the team that created the original Amiga chipset.

His later achievements included the Atari Lynx, an under-rated handheld that today, in terms of technological excellence, outshines its portable counterparts in the market.

Long may his Commodore creations continue.

# Communicator II

Only a few months after the release of the Communicator, the Netherland-based company Eureka have announced the imminent arrival of its sequel – the Communicator II.

The original hardware allowed the connection of the CD32 to any Amiga and PC. By using the CD32 as a serial 2-way CD-ROM drive, multimedia presentations including FMV (through the use of the FMV cartridge), Photo CD's and audio can be controlled and created.

The Mark II version improvements include an extra keyboard plug for A2000/3000, a serial cable that is now a DB25 serial to RJ10 plug and a new casing design.

Extra software has also been introduced from Mediapoint that aids audio and video control to a variety of PD titles.

The Communicator II costs approximately £99 and will be reviewed in next month's *Amiga Computing*.

# Flexidump upgraded and improved

Care Electronics, makers of Flexidump 3, have released an enhanced version of the program which the company claims can remove banding and white lines from all dot matrix and bubble jet printers. The company says that ribbon life is extended and print quality is very consistent.

The new system, called "shingling," adds to the recent additions of dithering and anti-aliasing in the latest version. Anyone with Flexidump 3 that doesn't include the "shingling" option can upgrade free of charge.

For those with an earlier version of Flexidump an upgrade is available for £14.95. Care Electronics can be reached on 0923 894064.

# Silica extends warranty



*Silica: Offering a comprehensive warranty scheme*

In a bid to provide a better deal for the customer, Silica have introduced a comprehensive extended warranty on its products, including games consoles, with the launch of "SilicaCare".

The scheme provides repair and replacement of parts, including major hardware such as hard drives and monitor tubes, for a single or whole computer system.

The warranty can be arranged for up to five years, tailoring the needs of the individuals. If you have an Amiga computer system worth up to £1500, for a two year policy it costs £38 for free repairs, delivery and courier service.

"As high-tech games consoles and computers become a part of everyday homes, more non-technical users want the assurance of a total service package.

"SilicaCare provides them with the peace of mind that should anything go wrong, it will be immediately fixed." stated Silica's retail controller, Ken Browning.

For more details, phone Silica Systems on 081-309 1111

# More add-ons for Lightwave

As Lightwave PAL finally reaches the shores of the UK, the 24Bit Club is releasing the Lightwave Collection Sets 1 & 2 to aid artists with their work.

Costing £29.95 each, each set contains 10 disks filled with objects, scenes, fonts and textures and comes complete with a user guide.

For the £3.95 sampler disk containing various examples from the collection, contact Gordon Keenan on 041-946 2191.




*Lightwave Collection: A variety of images to be used with the top-rated graphics software*

# Bulletin boards made easy

To combat the tedium of BBS login screens, a group of Sysops [system operators] have decided to create MAXlink, a networking bulletin board. The idea behind the scheme is once a user has joined and all their details have been taken, the data is passed on to all the other MAXlink BBS.

This in turn provides instant membership to all the bulletin boards under the MAXlink banner and saves the user time and money.

# Art by the people for the people

The Digital Gallery is a new concept being put forward by PUMECO which allows magazine readers to send their computer generated artwork in for inclusion on a four hour video.

Presented as a slideshow, artists – part-time or otherwise – can submit their work with a £20 fee and have the opportunity to show off the fruits of their labour to the public.

There is no age restriction and for further information, call PUMECO on 0482 500597.

# Online growth

With the continual enlarging of CompuServe's facilities, this month sees the introduction of the on-line service UK Professionals Forum, which focuses on the needs of key professional groups in Britain.

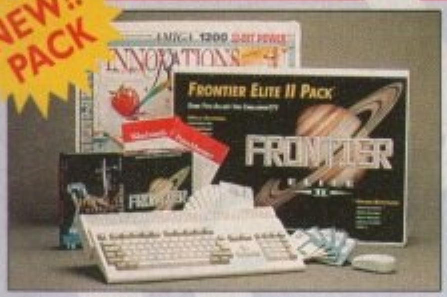
At present, the forum has areas for members of the legal, medical, engineering, financial, marketing and media professions. The various fields are catered for via the use of message sections and libraries and CompuServe hope that the new service will encourage the involvement of the appropriate national bodies.

To join CompuServe, phone 0800 289378 for more details.

# Heard the latest?

Have you heard any interesting Amiga news recently? If you've picked up some hot gossip that you think we could be interested in give Adam Phillips a call now on 0625 878888.

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| | Quantity | Price |
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*Brilliance* " Brilliant " Graphics Paint Package " In terms of design and sheer specifications Digital Creations really seem to have done everything right. Effectiveness..." **99%.**" I really can't fault the end results" **- CU Amiga Review**
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Based on the best selling Vidi Amiga 12. This all new version offers real time colour capture from any video source. Full AGA chipset support as standard for all A1200/A4000.
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For a limited period from 10 April until 30 June we will be giving away a **FREE** copy of Montage 24 worth 300 U.S Dollars. Montage 24 features Real Time font scaling, embossing and shadowing, colour spreads and transparency effects with an effective resolution of 1 nanosecond. Its many image processing capabilities include translucency blending, image compositing and beveled boxes. Now you can enjoy the benefits of the ultimate in high quality 24 - bit titling for OpalVision and the Amiga.

Limited Offer **£349.99** includes FREE Montage 24

## Opal Vision Video Processor



We have received confirmation that the OpalVision Video Processor with Roaster Chip and the Opalvision Video Suite samples will be with us within weeks and volume supply will arrive early summer.

Voucher Price **£659.99**

Video Processor Module **£899.99**

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## AlfaScan - Plus 256 Greyscale & Alfa Colour 256K Colour Hand Scanner

This Superb A4 Amiga Scanner voted "Amiga Shopper Best Buy", arrives complete with Merge IT and Micrograph OCR Software. Merge IT allows the simple, quick merging of two on-screen images and Micrograph OCR turns your Amiga into an efficient text reading system.Amiga 500/500 plus /A600 /A1200 /A1500 /2000 /3000 /4000

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* Kickstart, Workbench V1.2 or higher.

**£129.99** Alpha Scan PlusWith OCR software

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Denny Atkin reveals the release of the all-new TypeSmith and views two other important upgrades

USA news

# Tales of the unexpected

While we've all been closely watching Soft-Logik to see when they'd release the much-awaited PageStream 3.0, the company slipped a surprise upgrade out the door. TypeSmith, the premier font editor for the Amiga, has been updated to version 2.5.

The biggest improvement in this new version is the addition of support for TrueType fonts. TrueType is the standard outline font system on both the Macintosh and Microsoft Windows, so you can find the fonts just about everywhere. (On this side of the pond, you can buy a CD-ROM with over 500 TrueType fonts for only $19.95!)

Although no Amiga applications directly support TrueType typefaces, TypeSmith will let you convert them to formats that can be used with Amiga applications such as PageStream, WordWorth, Final Writer, Brilliance, and LightWave 3-D.

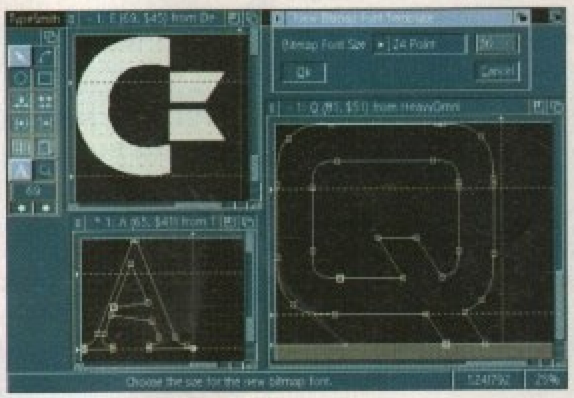
TypeSmith 2.5 supports saving and loading fonts in TrueType, PostScript Type 1, Compugraphic Intellifont (the Amiga's native bitmap font format), Soft-Logik, and IFF RFF formats. You can create your own fonts, or automatically trace digitized font pictures or bitmap fonts.

With previous versions of TypeSmith, converting large batches of fonts was a tedious operation, forcing you to select each typeface individually.

TypeSmith 2.5 adds a new Batch Convert ARexx macro that lets you convert an entire directory of fonts with the press of a single key. Full AmigaGuide help makes using both new and old features a snap.

The program retails for $199.95. If you own TypeSmith 2.0, you can upgrade for $25 plus shipping and handling ($5 USA/Canada, $15 International); TypeSmith 1.0 owners pay $65 plus shipping and handling.

For more information, contact Soft-Logik, 1113F South Towne Square, St. Louis, MO 63123 USA; phone (314) 894-8608; fax (314) 894-3280; or e-mail tech@slpc.com.



*The Amiga's ultimate font editor enjoys yet another impressive upgrade*

## Pixel power

Axiom Software has completely rewritten their 3D object designer program, Pixel 3D, from the ground up. The new version, Pixel 3D Professional Version 2 (Axiom calls it PixPro2 for short), has an improved interface and sports many powerful new features.

Axiom's president, Scott Thede, promises that, unlike some US companies, Axiom will continue to develop products for the Amiga. "To be completely honest," he says, "we at Axiom Software wish we could program the Amiga for the rest of our lives; after all, it takes 'forever' to learn how to program the thing!"

Amiga 1200 and 4000 owners will be happy to see full AGA support in PixPro2, taking advantage of the higher resolutions and deeper palettes available on those machines.

The program now has full support for both PostScript fonts and PostScript files. Bitmap support is amazing, with an artificial-intelligence bitmap-to-3D conversion, simplified bitmap smoothing, and the ability to link to ASDG's Art Department Professional to automatically convert 24-bit files.

Creation of 3D objects is simple, with both point editing and polygon painting techniques available. Objects can be twisted, stretched, and bevelled. Complete ARexx support makes batch processing simple, and object hierarchies simplifies working with complex 3D structures.

PixPro2 handles loading, saving, and conversion of 17 file formats, including LightWave scenes, Imagine hierarchies, AutoDesk 3D Studio binary and ASCII formats, and WaveFront.

Axiom says that PixPro2's AutoCAD DXF support is the most comprehensive available on the Amiga.

A professional program, PixPro2 retails for $299.95. Upgrades from version 1.0 are $99.99. For more information, contact Axiom Software, 1526 122nd Street, Burnsville, Minnesota 55337 USA; phone (612) 894-0596; fax (612) 894-1127.

# New light through new windows

Hot on the heels of the release of the standalone LightWave 3D 3.5 for the Amiga, NewTek has announced LightWave 4.0. Like version 3.5, this release won't require a Video Toaster board.

But unlike earlier versions, this one doesn't even require an Amiga – it's also available for Windows, Windows NT, and Silicon Graphics (SGI) machines. The $145 upgrade price from version 3.5 allows you to update to version 4.0 on the platform of your choice.

LightWave 4.0 will offer the same basic features set on all platforms, as well as full cross-platform compatibility. This means that you could, for instance, create a complex scene on your Amiga at home, save it to disk, and take it to work where you could render it on a blazing-fast Pentium 90 or SGI system.

Like Axiom, NewTek has stressed its commitment to future Amiga development. "The majority of our user base currently use Amigas, and many users prefer it for desktop video and graphics applications," says NewTek's Tim Jenison.

"However, users on other platforms wanted LightWave's power on their machines, and we wanted to have LightWave keep its position as the professional standard in 3D graphics."

LightWave has been used to create graphics for many popular television programs, including Star Trek: The Next Generation, SeaQuest DSV, Babylon 5, Robocop, Viper, Unsolved Mysteries, and Weird Science.

Babylon 5 won an Emmy (the US television equivalent to an Oscar) last year for its LightWave-produced graphics.

## EA titbit

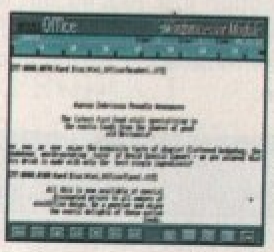
**Although nothing's been announced, Electronic Arts' Orlando Guzman recently popped up on the CompuServe network asking what the users there would expect from a new version of DeluxePaint.**

**So it appears Electronic Arts is still working on DeluxePaint V for the Amiga, despite Commodore's situation.**

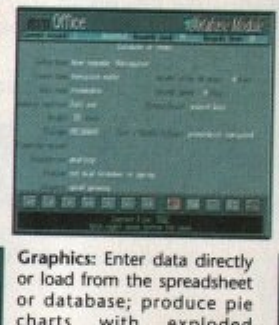
**Have a feature you're dying to see in the next DPaint? Send your electronic mail to oguz@ea.com and let him know.**



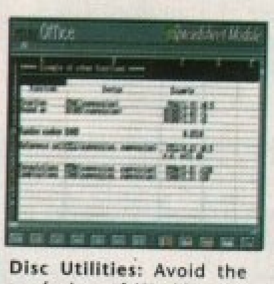




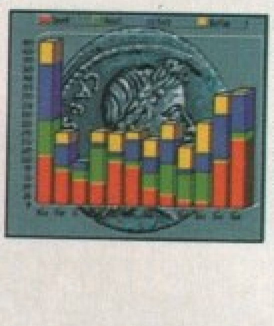




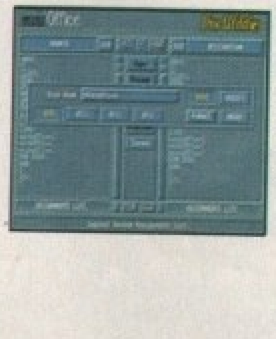












# A console too far?

*Adam Phillips asks what kind of future the CD32 can expect in the hands of the looming multi-corporate competition...*



The CD32 always had one thing going for it. Despite not being exactly the most profound step forward in technological history and perhaps even a little cynical with its 1200 innards with attached CD drive, the console was and still is, albeit with an ever dwindling supply, in the shops.

Compared to some of the heady spec-listed delights of the 3DO, Jaguar, Sony PlayStation, Sega Saturn, Nintendo Ultra 64 and so on, the Commodore machine is looking positively Jurassic.

While most of the above machines are not yet available, there's enough food for thought there to make one wonder if the soon-to-be reborn Commodore should even bother with the console market and concentrate their R&D on what they do best – making home computers.

With the likes of Panasonic, Sony and Sanyo moving in to the gaming arena flexing their rather financially well-developed muscle, a company like Commodore which, as we all know is having a rather difficult time of it at the moment concerning cash flow, may well be in a position, even with a new buyer, where they simply can't compete.

Up until last year, the market-place was dominated by Nintendo and Sega but with huge corporate industries swooping in to clean the market place up, what real hope has the CD32 got in the grand scheme of things?

While the console is doing well in Britain, the market here is small fry compared to the all important US and Japanese sectors where the real money is made.

Another argument is the kind of software that is available for the machine. While David Pleasance of Commodore UK may well be telling us that there are plenty of CD32-specific titles winging their way to the grey lunchbox, punters in the meantime are consistently having to put up with the usual port overs from the A500 and 1200.

The words FMV ring out in defence but alas, nothing has appeared across any format to warrant the splashing out of the extra cash. Okay, this leaves us with the apparently huge market for music and video CDs that can be plugged straight in to your machine.

This may well be the best hope for the Commodore machine but again, is it enough with a household that usually boasts a video recorder and stereo system anyway?

For a CD32 with FMV, it'll end up costing round £450 plus money for a decent set of speakers to get the most out of the image and music-playing facilities.

So with all this negative reinforcement, what can Commodore do once it's found a buyer? Let's say that the most likely option of a management buyout does go ahead – there will be very little money for continuing production lines, let alone sinking cash in to R&D.

How can the once great company that used to steal the limelight on the small amateur dramatics stage of computing face the full blown, all dancing and singing production of some of the largest companies on the face of the planet?

## FRUITFUL

By concentrating on what Commodore do best – home computers. Whether sailing on the sweet breeze of success or drowning in the choppy seas of the ill-fated DOS attempt, the Amiga range in Europe has continually been buoyant and fruitful.

Indeed, could the CD32 turn in to another hopping-on-the-bandwagon disaster where Commodore simply don't have the financial clout to get their product seen or heard about.

The CD32 may well hold the market share in the UK over the Mega CD and PC CD-ROM but, in real terms, the market-place is tiny at the moment.

Take your average home computer buyer. When they wander down to the nearest Dixons, they no longer have a choice. With the Atari ST and Falcon well and truly buried under a heap of bad management and diabolical marketing, it has left Commodore in a prime position for tempting the low-price bracket buyer.

You have a choice. Either cough up over £1,000 for a PC that may be redundant in three years unless you splash out more money on a mother board upgrade, or buy an inexpensive home computer that can word process, DTP, play games and has consistent and impressive software support – the A1200 and beyond.

With this lack of competition and possibilities for a potentially huge customer base, Commodore is in an ideal and enviable position where they already have a strong reputation for quality, durability and boast excellent European distribution. With the all-important and precious cashflow, this seems to be the only logistical path for the company to follow.

Who can touch them with computers for under £400? The answer. Not Sony, not Panasonic, not Hewlett Packard – in fact, nobody. Give up the console ghost – the competition just moved out of the playground and in to the battle field where only the cash-loaded, PR-pumped strongest survive.

## The AC team



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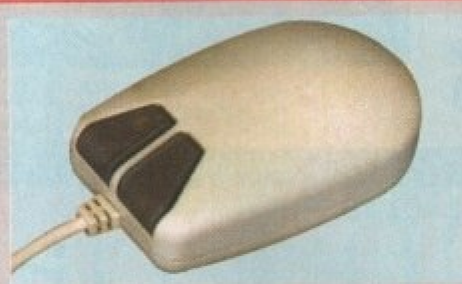
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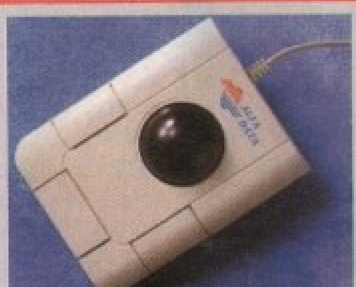
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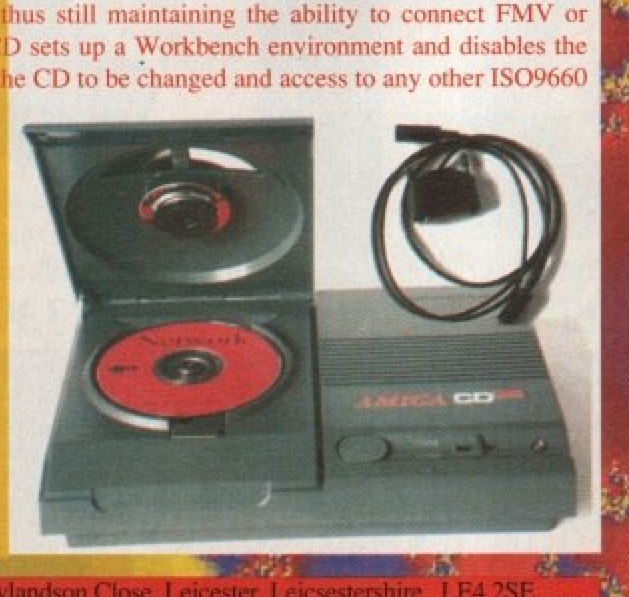
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# getting started



## The Amiga Computing CoverDisk is designed to be as simple to use as possible. Follow these instructions and you'll be up and running in no time!

The Files drawer contains all the utilities set up so that you can use them from the CoverDisk. A Games drawer is also provided so that you can play these immediately. If you want to install the games make sure you copy all the necessary files across as listed in the CoverDisk pages.

**We have now managed to fix the problem with AmigaDOS displaying a "disk is write protected" requester when a write-enabled disk is inserted. Just make sure you insert a blank disk when the installer programs tell you – and not before or after.**

## De-archiving applications - Workbench 2.0 and above

Always boot from your CoverDisk when de-archiving applications. The installer programs can be located via the install icon with the appropriate name in the WB_2&3_Only drawer.

The de-archiving procedure has been much improved and now combines the power of the official Commodore installer program with that of Workbench 2.0 and 3.0.

The installer program is designed to be powerful yet simple for the beginner and features a user-friendly interface allowing you to de-archive programs with a minimum amount of fuss. The installer programs for Workbench 2 and 3 users can be located via the icons named:

```
Install[program name]
```

eg:

```
InstallPFM
```

To run, simply double click on the icon which will load up the installer program.

### Using the installer

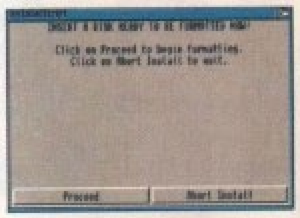
Ignore the buttons that appear when the installer program boots up and simply click on the Proceed button. The program will then copy the necessary files to RAM.

Once this has finished it will inform you that it is about to format a disk in DF0. Click on Proceed, at which point you will be told to insert a blank disk ready for formatting.

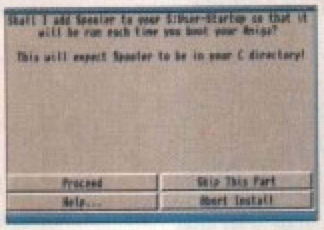
Once you have clicked on Proceed, the installer will indicate that it is formatting the disk in DF0. When this has finished, click on Proceed again to start the de-archiving procedure. When the application has been de-archived you will be told where the de-archived files are. Click once again on Proceed to finish.

If at any time you are unsure as to whether you want to continue installing, you can click on the Abort Install button.

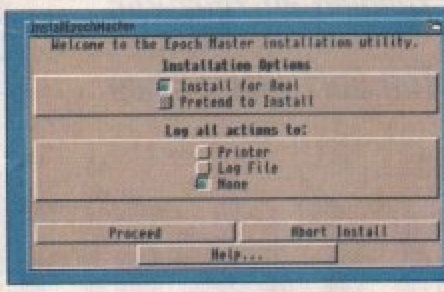
Occasionally, utilities may need to add instructions to your User-Startup file located in the S directory so that they will function correctly. If you want to add the instructions, click on Proceed when prompted.



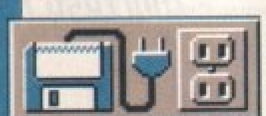

*Don't forget to insert a blank disk at the prompt and before pressing Proceed*




*Any commands that need to be added to your User-Startup can be done with the press of a button*




*Don't worry about the installer options. Simply click on the Proceed button*



*The Workbench 2.0 and 3.0 installer icon*

## De-archiving applications - Workbench 1.3

Always boot from your CoverDisk when de-archiving applications. The installer programs can be located via the install icon with the appropriate name in the WB_1.3_Only drawer.

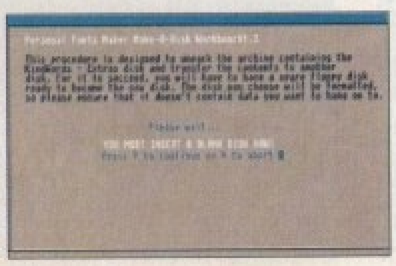
```
Install[program name]_1.3
```

eg:

```
InstallPFM_1.3
```

When you load up the 1.3 installer the program will first prepare itself ready to de-archive the program to a blank disk(s). You will then be asked to insert a disk to be formatted into DF0 and either press y to continue or n to abort.

Provided you answer y, the disk you insert will be formatted and the application de-archived.



*After inserting a blank disk press y to continue or "n" to abort*

### Installing utilities

You should first run the MakeUtilitiesDisk_1.3 to format a blank disk called ACUtilities which will be used to store any utilities you eventually install.

This disk can be used with future CoverDisk utilities until it becomes full. The MakeUtilitiesDisk1.3 program will be a permanent feature of the CoverDisk.

To install any utilities, boot your machine with your CoverDisk inserted in DF0. Utilities can be installed by clicking on their install icon found in the appropriate drawer in the WB_1.3_Only drawer. You cannot specify their destination and any additions to the Startup-Sequence must be done manually.

When installed the utilities are copied to a drawer called ACUtils on the ACUtilities disk.

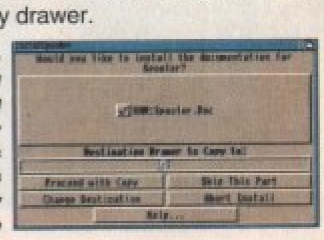
### Installing utilities

The procedure for installing utilities is much the same as installing applications, except that you can boot from your hard drive or Workbench disk. As utilities don't need to be de-archived, you are asked to specify a directory on your hard drive or Workbench disk where you would like to install them.

If you don't want to install to the default directory you can change it by clicking on Change Destination. The Show Drives button will allow you to select a new device and directory. You can create a new drawer for your utility to go in by clicking on the Make New Drawer button and typing in the name.

You can also make a utilities disk by running the MakeUtilitiesDisk1.3 program located in the WB_1.3_only drawer and installing your utilities to here. At times you may be asked if you want to install a utility's documentation. A tick box indicates that the documentation is selected for inclusion, but you can click on the box to ignore it or simply click on the Skip This Part button.

The utility installer programs can be found in the appropriate program drawer in the WB_2&3_Only drawer.




*You can easily install documents and create new drawer thanks to the installer's user-friendly interface*

# THE Cover

## Put across

*Polish up your spheres with our collection of stunning 3D textures courtesy of The Soft Alternative*







If your favourite pastime is creating stunning graphical images, whether 2D or 3D, you will know what a time-consuming task it is drawing natural looking images such as clouds, rock, water etc.

Thanks to The Soft Alternative, *Amiga Computing* has supplied 19 superb, photo-realistic images taken from a variety of subjects.

Using these images with your favourite graphic applications, you can breath new life into your designs, creating realistic images in half the time.

The textures have been compressed in Jpeg format so that they can fit onto our CoverDisk. Therefore you will need a suitable Jpeg viewer to view them.

As they are in 24-bit format, non AGA owners will need to have a 24-bit card to view them. However, we have also supplied a superb program called HAMLabPlus on CoverDisk 2 which you can use to view the images and change them into a format your applications can load.

Just follow the instruction given for HAMLabPlus to see how you can use your textures.

We have supplied a variety of images encompassing natural elements, as we believe these are the most difficult to emulate. These include clouds, water, rock, sand, space and landscapes.

The textures are primarily of use to those interested in 3D rendering, but they work just as well as backdrops or brushes in Deluxe Paint, Brilliance, Personal Paint and other 2D applications.

So that we could fit so many of these textures on the disk, they have been compressed with a greater ratio than that of the original images. So, if you decide to upgrade to the full package, you can expect to receive images of a higher quality than the ones supplied here.

## The image bank

This box demonstrates all the images supplied on our CoverDisk. If you cannot view the images on your Amiga, choose the ones you wish to use from here and then load them into HAMLabPlus to be converted. This will save you having to load each one in order to see what they look like.



# Disks

## F1Ed upgrade

Steve Smith, the creator of F1Ed given away on the September issue, has informed us that the program will not function correctly on the A600 The Wild, Weird and Wicked pack version of Formula One Grand Prix. Therefore, he has kindly offered an upgraded F1Ed program for a nominal fee.

For just £5 you will recieve a version of F1Ed that is totally compatible with the aforementioned A600 pack, and includes new features such as the ability to change the costume colours of your pit crew, use a database of real driver's lap times to calculate the team and driver performance figures and the ability to edit the zoom and angles used on the external views cameras.

This will also qualify you as a registered user, recieving new updates as and when Steve completes them.

Please make your cheques or postal orders payable to Stephen Smith and send them to 34, Wolsey Drive, Kingston Upon Thames, Surrey, KT2 5DN. Please do not phone or write to Steve regarding problems with F1Ed.

## Scroller2

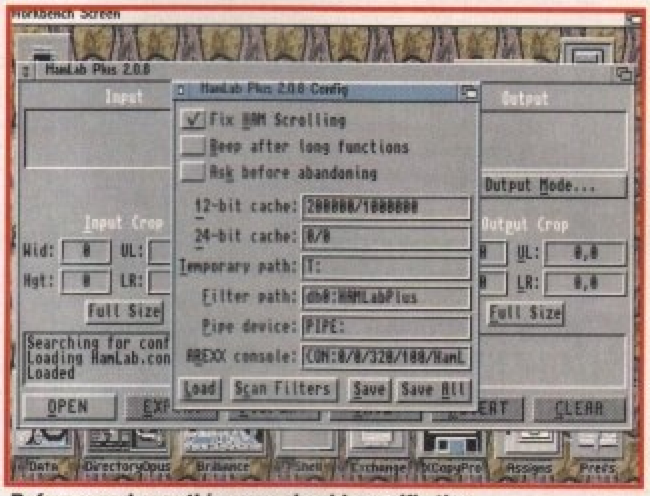
We apologise for the problems readers have been having with the Scroller2 program, but unfortunately duplication caused an error whereby the program would not work with the addition of Fast RAM.

Fortunately, we now have a bug fix which you will find on CoverDisk 2 entitled Scroller2Fix. Run this program and when told to insert volume <nothing> insert your Scroller2 disk.

After a short while of disk swapping, the process will finish and you will be able to use your Scroller2 disk without the need to remove your Fast RAM.

If you have a second drive you can insert your Scroller2 disk into DF1: and run the Scroller2Fix program from your CoverDisk in DF0:. Apologies for any inconvenience caused.

We would like to make it clear that the original Scroller2 program, as offered in the CoverDisk Upgrade advert, is totally compatible with Fast RAM expansions and we will be running our Scroller2 tutorial next .




*Before you do anything you should specifiy the pathname for the filters in the Configuration menu*

# the right image

## HAMLabPlus

**Author: J. E. Hanway**

HAMLabPlus has been included so that you can load, view and change the file format of the stunning 3D textures from the Soft Alternative which are free on CoverDisk 1.

This means that you will be able to use them in your own programs such as Deluxe Paint, Imagine, ADPro and many other graphic applications.

The textures are supplied in Jpeg format as this format has extremely good compression ratios, while not sacrificing the original quality too much.

As graphic applications do not support Jpeg we will need to use HAMLabPlus to change the picture format to something that can be used.

When you first load HAMLabPlus you will be presented with the copyright information. Click on the close window gadget to load the program.

You may get a requester stating that ➤



## Installing HAMLabPlus

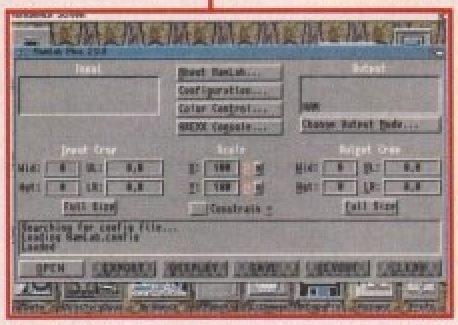
To install HAMLabPlus simply double-click on the InstallHAMLabPlus icon. When the installer has loaded, follow the instructions to install the program to either a floppy disk or hard drive. If you are a 1.3 user you will need to install the program to your ACUtilities disk.



*In order to use the 3D textures you should change the output mode to a suitable screen mode*



*If you want good quality textures, export them in 24-bit IFF ILBM – but watch their size*



*HAMLabPlus uses a very user-friendly interface made up of buttons and gadgets*

➤

there are no input or output filters. OK this requester and the first thing we will do is to select our filters for future use.

From the main display click on the Configuration button. This will display a window showing certain attributes about the program. Where it reads Filters: type in the following;

If you are running from the CoverDisk:

```
AmigaComputing:Files/HAMLabPlus/Filters
```

If you are running from a disk, HAMLabPlus has been installed to:

```
HAMLabPlus
```

This is because when you install HAMLabPLus the filters are copied into the same directory as the main program.

Now click on the Scan Filters button, at which point the input and output filters will be loaded. Next select Save All and click on OK in the file requester. The next time you load HAMLabPlus the filters should load successfully.

Insert CoverDisk 1 – 3DTextures – and click on the Open button on the HAMLabPlus interface. This will allow you to load the Jpeg textures. Select a file to load and click on OK.

Once the picture has loaded it will be cropped to 512x512 as this is the demo version of HAMLabPlus – you will need to register if you want the fully working version.

To actually view the file click on the Display button. You can change the screenmode in which the file is displayed and saved by clicking on the Change Output Mode and selecting a suitable resolution.

The Bit Planes 1, 2, 3, 4 and 5 refer to 2 colours, 4 colours, 8 colours, 16 colours and 32 colours respectively. You can also change the type of dithering you require for colours that are not palette supported.

Once you are happy with the screen mode of your texture you can save it out as an IFF using the Save button. If you want the image saved in 24 bit IFF ILBM or other formats, click on the Export button. HAM mode pictures will be very large so watch your RAM. You can then select the directory where you would like to save your decompressed files so that you can use them in your favourite graphics application.

## Noisome

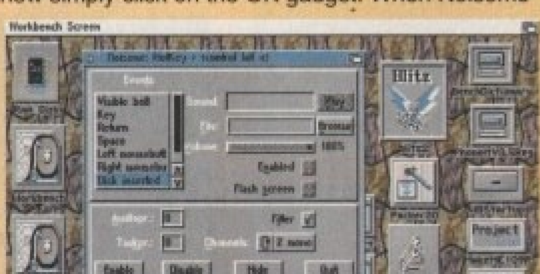
**Author: David Larsson**
**Workbench 2 and above only**

If you have ever wanted to attach sound effects to certain keyboard events you need Noisome.

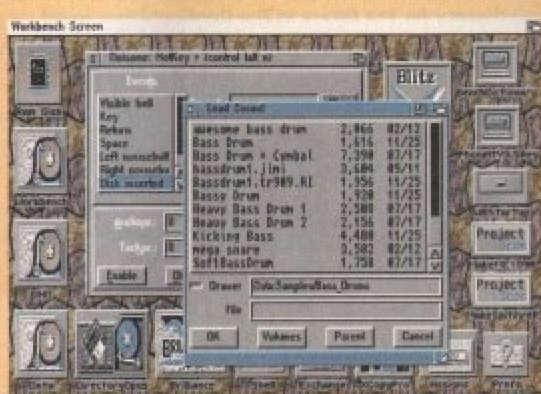
Noisome effectively allows you to lock sound samples to certain actions performed on the input devices of your Amiga – the keyboard, mouse and disk drives.

As well as this it also allows you to decide exactly how your sound samples are played by using a totally intuition interface made up of clearly labelled buttons and gadgets.

When you first load Noisome a system requester will appear telling you that the file S:Noisome.prefs could not be read. This is because we haven't yet defined a preferences file for the program, so for now simply click on the OK gadget. When Noisome eventually loads up you will be presented with the main interface, featuring a collection of buttons and switches. Much of the interface is taken up by the selection window to the left. In here you will find the functions that you can attach sound effects to.



*Noisome will allow your Amiga to play selected sound samples when certain events occur*



*All you need to do is select an event and then load an appropriate sound sample*

Visible bell is the actual system alarm, key, Return (key), Space (bar), left mouse button, right mouse button, disk inserted and disk removed.

Probably the most effective option is the disk inserted and disk removed. When a disk is inserted or removed from the drive a sample of your choice will be played. So how do you attach a sample to an option?

Let's imagine that you wanted to attach a sample called Spring to the disk removed option. Firstly, select the disk removed option so that it is selected and then click on the Browse button to the right of the File gadget.

In the file requester select your Spring sample and then click on Play to the right of the Sound gadget. You should hear the sample play.

At this point you can effect how the sample plays by clicking the Filter on and off, changing the volume and clicking on the Channel button to specify the channel output.

Once you are happy with your setting you can then save them as the S:Noisome.prefs which failed to load earlier. From the Preferences menu select Save.

This will save your current setting to S:Noisome.prefs so that they can be loaded every time the program is run. If you now click on the Enable button at the bottom of the main interface your selections will be activated.

Click on Hide to remove the interface and now, whenever you eject a disk you should hear your sample playing.

If you want Noisome to run automatically when you boot your Amiga, you should drag the program via the icon into your WbStartup drawer.

### Installing Noisome

To install Noisome simply double-click on the InstallNoisome icon. When the installer has loaded follow the instructions to install the program to either a floppy disk or hard drive.







# DiallingCodes

**Author: Julian Wright**
**Workbench 2 and above only**

DiallingCodes is a great little utility written in Blitz Basic 2 that will allow you to trace those elusive UK STD and BT 'special' codes.

DiallingCodes features an impressive array of features including knowledge of all 1, 2 & 3 figure International Dialling Codes (more than 170 countries); instantaneous display of information; type in code and get location; type in location and get code; displays time difference for International Codes; no need to type in full Town/Country name and it's fully multi-tasking

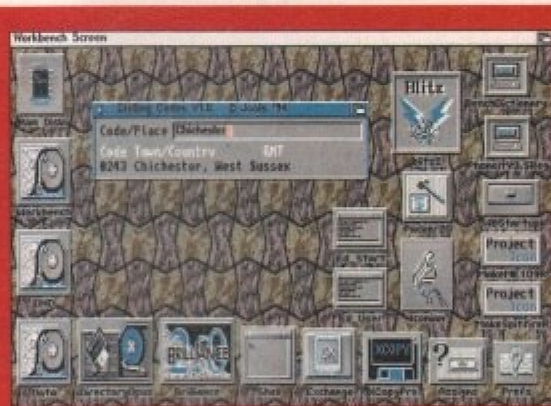
To run DiallingCodes simply double-click on the icon and you will be presented with a small window and a string gadget. You can type the following in the gadget:

UK STD Dialling Code – Returns the location
UK Town or City – Returns the STD Dialling Code
International Dialling Code – Returns the country and time difference
Country – Returns the International Dialling Code and time difference

You are not required to type in the full name of town, city or country names. If you type in just a few letters from the location the program will search its entire database for a match.

If you are looking for a country with a known International Dialling Code, always type a plus sign (+) in front of the number so that the program knows it is an international code you're after.

For more information regarding DiallingCodes, please read the documentation provided by the author.



*Use DiallingCodes to trace those elusive STD codes and International Dialling Codes*

## Installing DiallingCodes

To install DiallingCodes simply double-click on the InstallDiallingCodes icon. When the installer has loaded, follow the instructions to install the program to either a floppy disk or hard drive.

# Faulty CoverDisk

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# AticAtac

**Author: Ultimate Play The Game**

A snapshot file for use with the ZXSpectrum emulator given away on last month's CoverDisk, AticAtac is one of the all time greats written by the enviable Ultimate when the Spectrum was in its heyday.

By now you should know how to run your snapshot files on the emulator, so let's go straight into the plot.

You have been trapped in an evil, haunted castle. Your task is to find the hidden Golden Key of A.C.G and escape via your only exit, the Main Doors.

The castle consists of five floors, including the Atic and the caverns which contain countless rooms. Within the rooms you may find furniture, food, drink, objects, ghosts, ghouls and monsters. Eat and drink sparingly so that you do not deplete your food supply.

Collect and utilise objects you find to your best advantage; be wary of slamming doors and working trapdoors which will try to trap you, and avoid contact with all the ghosts and monsters.

Each of the characters – Knight, Surf and Wizard – are armed with their own specific weapons, individual movement type and use of one set of secret passages, unbeknown to the others.

*Make sure you choose the right character for your type of game or you could end up dead rather quickly*




## Installing AticAtac

To install AticAtac simply double-click on the InstallAticAtac icon. When the installer has loaded, follow the instructions to install the program to either a floppy disk or hard drive. If you are a 1.3 user will need to install AticAtac to the AcUtilities disk.

## AticAtac controls

AticAtac can be controlled by Kempston or cursor joystick and keys. Remember that a joystick plugged into the Amiga's joystick port will act as a Kempston joystick.

| | |
|---|---|
| Q | Left |
| W | Right |
| E | Down |
| R | Up |
| T | Fire |
| Z or Symbol Shift | Pick up/drop |
| Space or Caps Shift | Pause |

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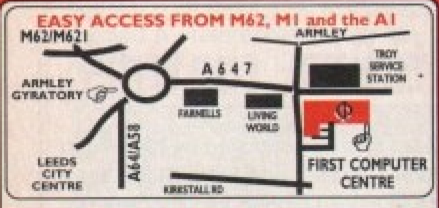
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DKB 1202 A1200 RAM board....£84.99
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LOW PRICES!

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### PRIMA CO-PRO & RAM

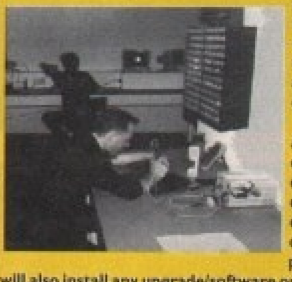
Realise the full potential of your A1200 with this trapdoor expansion. inc real time clock
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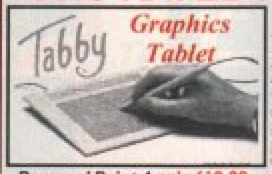
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AMIGA COMPUTING AUGUST 94




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hand held scanner with 256 greyscales and up to 800 Dpi
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The Professional answer

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4 Mb SIMM...NEW LOW PRICE!...£139.99
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for the A500/A500+& A1500/2000
28 Mhz, uses A500 side port so there is no internal fitting
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Brilliance Pro. paint and animation....£149.99
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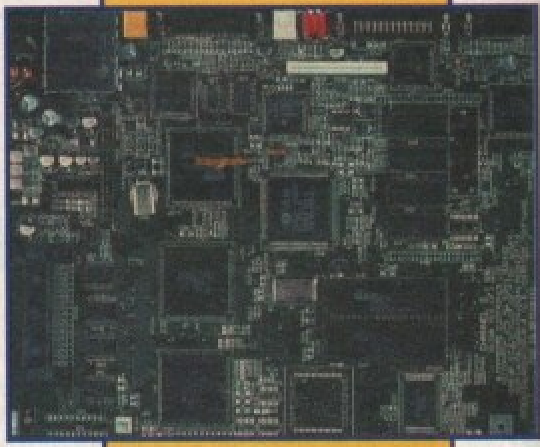
Card no. ____________ Expiry date ______

Please allow 28 days for delivery

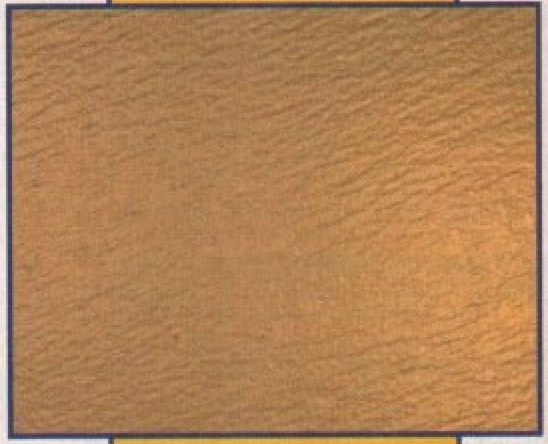
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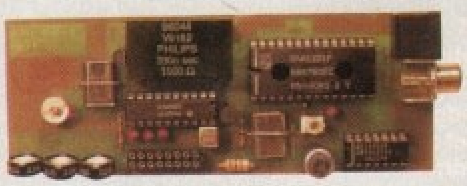
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## PICASSO II

*PICASSO II* is a graphics card with a difference, offering true retargetable graphics on any Zorro based Amiga. The installation is quick and simple. Just plug in the card, connect the cables and run a fully automatic install script. You will then find new *Picasso* resolutions available from the standard preferences ScreenModes program, all useable by OS friendly programs. The new CHUNKY option offers incredible speed with a 256 Workbench which is many times faster than AGA! *Picasso II* will intercept any program on it's first run, allowing you to tests it's compatibility and set your preferred screen choice thereafter. All screens are stored in Fast RAM, hence removing the 2Mb Chip RAM limitation. Total screen configuration is provided through PicassoMode, which allows the creation of custom screens quickly and simply. *Picasso II* comes with TVPaint Junior and drivers for ImageFX, AdPro, ImageMaster, Real 3D and GIF, IFF, JPEG and MPEG viewers. Also included is the MainActor animation program, and a TVPaint 2.0 option is also available.

| | |
|---|---|
| PICASSO II 2Mb | £349.95 |
| With TV PAINT 2 | £499.95 |



## PABLO ENCODER

PABLO is the new Video Encoder option for *Picasso II*. It offers the user two additional video ports, one standard Composite Sync Signal, and one S-VHS (Y-C) compatible port. All PAL compatible video devices can be plugged into Pablo, such as a colour TV or a video recorder. To Genlock, a Time Base Corrector is required. There are five resolutions available, these being 320x256, 320x512, 640x256, 640x512 and 768x576 in all colour depths including HighColour and TrueColour! A protective circuit integrated into Pablo ensures that no modes with more than a 15KHz line frequency can be routed through Pablo so you can safely switch to higher resolutions for your normal computer display. Pablo is supplied with all cables/adapters, Animation examples and *MainActor Professional*.

PABLO ENCODER £149.95

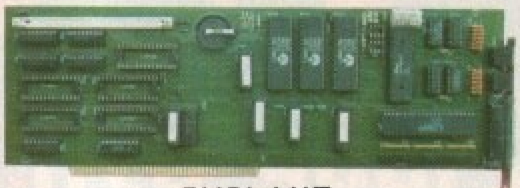
## MAINACTOR PROFESSIONAL

MainActor Professional is a modular animation package for the Amiga. It features intelligent caching, so if you don't have enough RAM you can play animations from any device i.e. play/edit/create a 400Mb animation on a 2Mb Amiga. With OS3.x you will get added speed as well as animations in a resizeable, scrollable window with colours adjusted to screen attributes. Sound support allows you to associate sound effects to every frame. There are animation loaders for Real-3D, IFF-Anim3, IFF-AnimJ, Picasso, AVI, GIF, FLI, FLC and DL. There is also an external player, MainView plus lots more. You can play all your animations directly via the Picasso II board (which fly in Chunky pixel mode!)

MAINACTOR PROFESSIONAL £ 49.95

Liana is a simple but powerful peer-to-peer network for connecting two Amiga computers directly via their parallel ports. Liana will work with all Amiga's and it's network driver is completely SANA-II (standard software interface for network protocols of Commodore) compatible. This means all networking packages using SANA-II will work with Liana (e.g. Commodore's TCP/IP package release 2 or ENVOY). Liana is supplied complete with the Commodore networking package ENVOY, which offers FileSystem import and export, network printing and multi-user support together with an easy installation and configuration procedure.

LIANA NETWORK £ 59.95



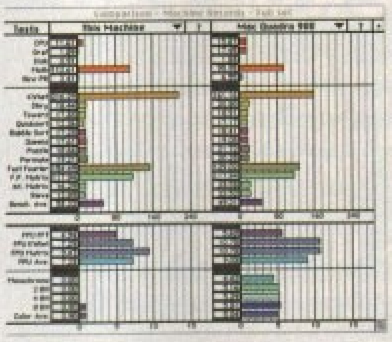
## EMPLANT

***Emplant*** is a very special product. It is the only hardware that offers multiple multi-tasking emulations from a single board. Here are some of the features of *Emplant*.

- *Compatible with all Zorro II/III Amiga's.*
- *Utilises Amiga memory, AmigaDOS devices, parallel/serial ports and Stereo sound capabilities.*
- *Extensive Video Driver support (ECS/AGA, Picasso II, Piccolo, Retina/Z3, Merlin, EGS, OpalVision, Rainbow II/III, etc.) including 16, 256, 65K & 16.8 million colour displays.*
- *SCSI Support (Hard Disk, Scanners, SyQuest, CD-ROM etc.)*

*MACINTOSH EMULATION*

The generic Mac emulation will perform as a Quadra 900 on a 68040 Amiga, and a IIci on a 68030 Amiga. All known software runs. The Mac emulation supports System 6.x/7.x, Hard drives, AmigaDOS partitions, Virtual screens, Stereo sound, File transfer, Printers, Modems, MIDI, SCSI peripherals, AppleTalk etc. Floppy support includes Emplant, Amax, IBM 720K/1.44Mb, Mac 800K (via AMIA) and 1.44Mb.



*Here is a real performance comparison using the Mac program Speedometer. It shows an Amiga 4000 with Emplant matched with a Quadra 900, 68040 at 33MHz! The Amiga is, of course, still running too!*

EMPLANT ON AN A4000/040

*IBM PC EMULATION*

The new IBM module is a true 486DX compatible emulation, including CPU, MMU and FPU. It will support normal/protected modes and run Windows 3.x, DOS 6.x, OS/2, application and leisure software.
Speed is dependant upon your 68xxx processor and is gained from a combination of custom logic, software and the Amiga! The emulation will offer colour VGA on AGA machines, and colour SVGA with a supported graphics card such as Picasso II. SoundBlaster Pro support is built in too. Please call for availability.

| | |
|---|---|
| EMPLANT BASIC | £299.95 |
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| EMPLANT OPTION B *(SCSI Interface)* | £349.95 |
| EMPLANT DELUXE *(Options A and B)* | £499.95 |
| EMPLANT IBM MODULE *(Call for availability)* | £ 99.95 |
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**SPECIAL SUMMER OFFER**

*DEDUCT*

***£50.00***

*WHEN YOU ORDER ANY EMPLANT BOARD WITH A PICASSO II 2Mb CARD!!*

**BBS**

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# OS 3.1

## KICKSTART AND WORKBENCH !!

THE FULLY LICENSED COMMODORE OS 3.1 RELEASE IS NOW AVAILABLE!
Each pack comprises ROM(s), Disk set and English manuals. The following versions are available :

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| *A500, A1500 and A2000* | *£ 84.95* |
| *A3000 and A4000 (inc. 3000/4000Tower)* | *£ 94.95* |

Update today and breath new life into your machine!
*2/3000 owners - 256 colour Workbench with Picasso II !*

| | |
|---|---|
| *Picasso II 2Mb + OS3.1 2000* | *£419.95* |
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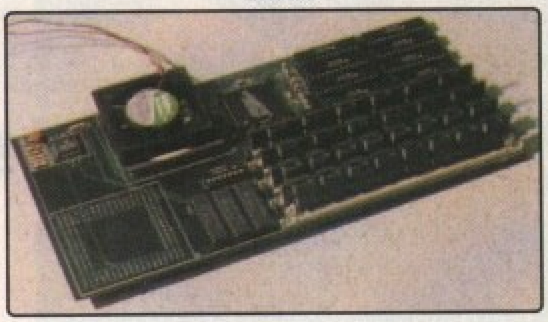
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# A wonga, wonga...

*Paul Austin guides you through the freelancing jungle*

As you can see, the vast majority of my work is 3D with occasional adventures into two dimensions for the odd info screen or multimedia job.

Even during these brief excursions into 2D,I have always done my best to avoid freehand elements, due to what's best described as total ineptitude. In fact, even with my best efforts, stick men invariably end up unrecognisable.

I'm mentioning this to illustrate the fact that a lack of physical skills should by no means be seen as a stumbling block when it comes to computer art.

Obviously this won't inspire confidence for those not consumed with a passion for 3D. However, even in two dimensions there's still huge scope for what is known as derived art.

In other words importing, manipulating and compositing real-world imagery to form a sometimes surreal mixture of photography, freehand, ray traced and digitised art.

So, if you have the imagination and some existing skills in other areas – such as photography and videography – you could easily combine them with your on-screen talents to enhance an existing business or open up new opportunities.

OK, if it's so easy why isn't everybody doing it. After all, if you don't need any physical skill it must be a doddle right? Alas no, as with every swing there follows the ubiquitous roundabout.

Although the Amiga can rescue any would-be artist from the limitations of the flesh the mental demands remain the same, and in fact in many cases the creative pressure is even higher than those endured by a traditional artist.

The reason being that every computer artist the world over starts out with roughly the same basic skills – commonly referred to as the machine and its software.

And because computer graphics rely on such a similar array of tools – regardless of format – it's much easier to produce predictable results. Your job is to develop a style – something which to many freehand artists comes naturally.

As computer art is primarily a mental discipline you can survive with the hand/eye co-ordination of a house brick, but if you don't have the eye and inspiration you're quite literally dead in the water.

Now before the mail bag explores with the vented spleens of a thousand outraged art school graduates, it's worth stressing that I certainly don't consider myself an artist in the classical sense.

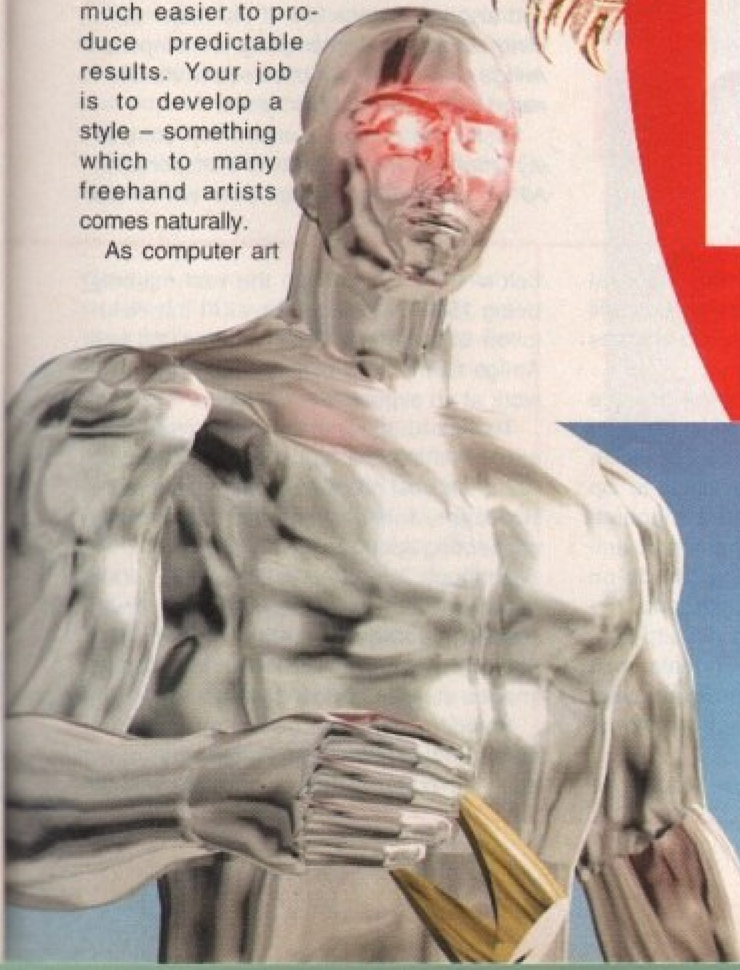
## COMMISSIONS

What I, and many others do, is commercial art, there's a very big difference. I work on commissions and therefore don't have to wait for inspiration to strike. All that's required is to turn a concept into reality – a process which can still be pretty painful.

While we're on the lofty plain of art and inspiration, it's perhaps worth stressing that artistic pretensions rarely have a place in commercial art. If, while negotiating a job, you come across as the *I am an artist..."* type there's a strong chance your career will be short lived. However, that doesn't mean you should take what you're given and be glad of it. In many cases the people commissioning the work will be blissfully unaware of the potential and perhaps more importantly the limitations of your particular field.

For example, jaws often drop at the sight of relatively simple chrome ➤







*Looks great on its own but add some text and it's just too cluttered*

objects resplendent in a sea of reflection. However, when you point to the Christmas tree in the corner – complete with a million individually modelled pine needles – the response will almost always be; "oh that, yes it's OK I suppose..."

The bottom line is to get involved in the design stage as soon as possible. As a result you can guide the client in the best direction for both parties.

Another point worth mentioning is not to let the software take over the show. All too often you see beautiful images ruined by the latest addition to the software.

No matter whether it's lens flare, motion blur, depth of field or any one of the hundreds of image processing options available via programs such as ADPro or ImageFX, always keep your goal clearly defined.

A classic example of overkill at its best is the Christmas card image in this very article. Although this doesn't suffer from new-feature-itis it does illustrate a very easy mistake to make.

A slightly more spatial version was commissioned for use on the front cover of an ST magazine. When the final image appeared in all it's texture-mapped glory I must admit I was fairly pleased – I'd even remembered to leave space for the CoverDisks – great.

However, when the cover words, flashes and masthead were added the vast majority of its appeal was lost. Once all the other elements arrived it was simply too cluttered – and the impact I was being paid for went out the window...

This is a key point of almost all commercial art work – you're being paid to make an impact, not to impress your peers. Invariably you're selling something in one way or another and it's your job to make the client's product leap out from the rest. As a result, adding intricate detail and clever technicalities that only a tiny handful of enthusiasts will appreciate isn't always good business. At worst they'll confuse the image, and at best waste your valuable time.

Obviously with the huge diversity of Amiga hardware and software, listing the lot is out of the question. As a result we'll concentrate on the elements which you'll need to do business, rather than those which will actually generate the end results.

Perhaps the most important of all has to be a fax modem. Thanks to the fax element you're provided with the essential ability to both send and receive ideas and proofs of work in progress.

It also overcomes two of the major stumbling blocks when attempting to incorporate Amiga graphics into a business world dominated by the PC and Macintosh.

Firstly, the modem element can completely side-step the problem of transportation. All too often your latest creation will be just

## The big pitch

OK, it's time to bite the bullet and have a bash, but how do you get your first job. Well first you need a portfolio and a place to send it. Perhaps the best way to achieve this is to do a couple of free/low cost jobs in exchange for a reference.

Assuming you're now armed with the necessary, you can start sending expensive video tapes or prints through the post to likely employers. However, beforehand it's worth doing a fax/mail out with a brief list of what you offer plus your references and perhaps an example or two.

Another excellent way of drumming up business is to blag your way into shows – preferably trade. That way you've got your target audience all in one place and better still they're all vying for a lead on the opposition.

When approaching business types it's useless to walk up brandishing an Amiga floppy. You'll need either a PC or Mac disk with the images or animation in a form that they can slap in their machine and look at immediately.

In most cases Jpeg will be acceptable, although it might be worth carrying a few Pcx, Pict or GIF examples just in case. When it comes to animation, obviously a video tape is the ideal medium.

However, in some cases animation on disk may be required. As a result it's worth learning something about both PC and Mac animation formats such as Flic and Quicktime.

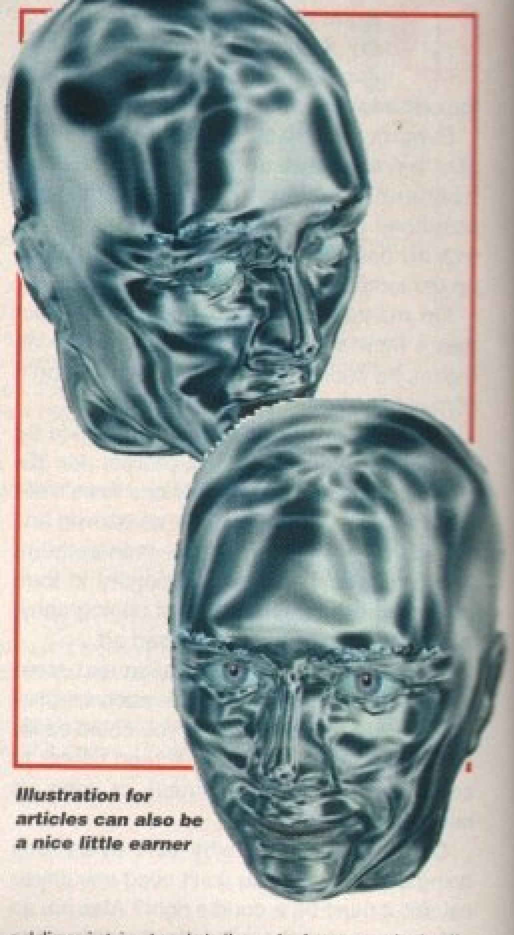


*Illustration for articles can also be a nice little earner*

## Stills

As you've probably gathered, the vast majority of my work revolves around still images, usually for covers or illustrations within articles.

The reason being that they are the most cost-effective method of freelancing on a part-time basis. Obviously, with a full time job it's usually impossible to zip off across the country with a machine packed with thousands of frames of animation – all of which need hands-on attention during transfer to the client.

Thanks to modems, high density floppies and high compression formats such as Jpeg, it's usually quite straightforward to transfer even the largest individual files.

When it comes to file size, I rarely go below 1024 x 1024 with the vast majority being 1500 x 1500 or above. At this resolution even American A4 magazines like Amiga Computing can still reproduce my work at an expectable resolution.

Thanks to Jpeg, even your largest creations will fit on a high density PC floppy using the best possible compression ratio. However, there is a word of warning concerning Jpeg.

Although it is often a life-saver it does have potential dangers. With the pressures on storage inherent with 24-bit art, it's often tempting to work with Jpeg images as your standard format.

However, even when using minimum compression the Jpeg format will introduce unwanted artefacts into the image

## Pre-production

Before starting or even agreeing to a job, give yourself some time to think things through. It's all too easy to agree straight off and then dive straight in, only to discover half-way through you've gone about it completely the wrong way.

Once you have a good idea of how to progress, sketch it out in rough and fax it through to the client for confirmation. If everyone's happy – and only then – it's time to proceed.

If the job revolves around some specific object, make sure you get hold of some photography of the exact item in question. Better still try to get hold of the item itself! Unbelievable as it may seem, I'll guarantee you'll get even simple objects horribly wrong if you rely on memory alone. And if someone is paying hard cash they'll quite rightly expect perfection.

In fact, this raises a key point for any freelancer. If you're not a perfectionist by nature you won't last very long. "That will do" simply doesn't come in to it. As they say, you're only as good as your last job – and if your livelihood depends on it, it better be good.

50k too big to fit on a PC floppy. But thanks to the infinite transfer potential of a modem it wouldn't matter if the file was 5Mb to big.

The only limitation is of course the impact on your phone bill – assuming you can't convince the client to dial into your system that is.

Secondly, thanks to the format conversion options offered by the Amiga's huge arsenal of image processing packages, quite literally any file type can be delivered direct – again regardless of file size.

Obviously when it comes to mass file transfer a modem becomes less attractive, however there are alternatives – see animation box out for more info.

### ON-LINE

As for getting on-line you can do as much or as little as you like. Accounts on CompuServe, CIX plus a Internet address are all very nice, however it's unlikely they'll be an essential.

As long as your client has a modem – and the vast majority of companies do – you can go direct.

Another must is a good printer. In an ideal world you'd have two. One laser for letters, flyers, invoices and other administration plus a dedicated graphics printer with which to display your wares at their colourful best.

Obviously this isn't an ideal or likely situation, so I'm afraid it's a question of priorities combined with cash-flow. If you want the best possible colour output the Primira is the only serious choice.

Thanks to a photo realistic add-on it's almost like producing chromalins via a repro-house. But unfortunately the running cost of a Primira is high, and although excellent for full colour images it isn't as impressive when it comes to black and white output.

If you're after a compromise of acceptable running costs, good colour proofing and quality black and white output, it might be worth looking at the Hewlett Packard HP 550C.

Although not laser quality it is an excellent compromise. Of course you could always opt for a colour laser printer – but if you can afford that sort of expenditure why not sell up and move to the Caribbean, you obviously don't need the cash anyway.

Finally, it's essential that you invest in some sort of 24-bit display device. Although Ham8 is great it simply doesn't match-up to a true 24-bit display.

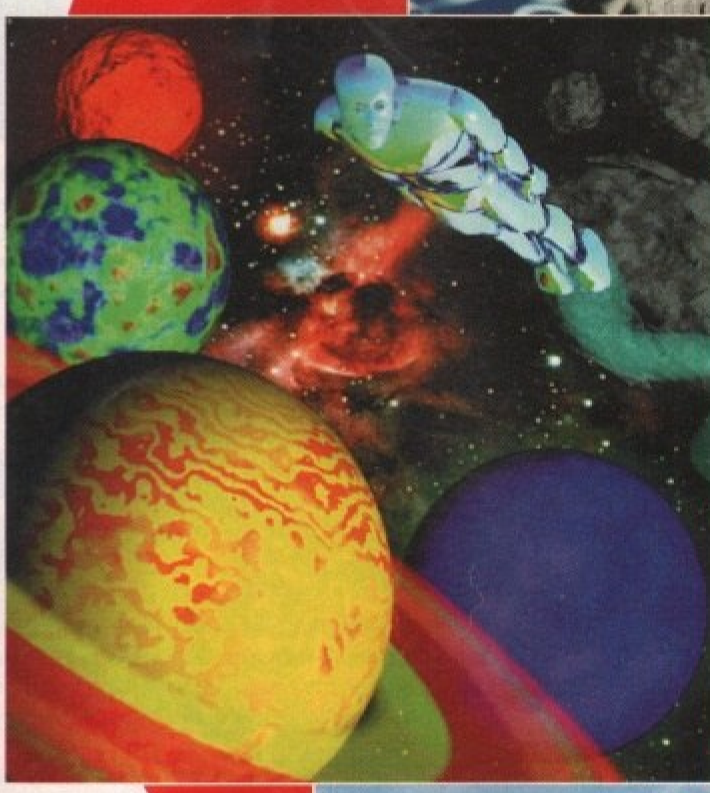
Basically the choice is yours but it's worth ensuring that the board and accompanying paint package you pick has both an alpha channel and some form of virtual memory.

The alpha channel is an absolute must when it comes to blending elements and ➤



*The wealth of packages available for the Amiga make it an ideal freelancers machine*

*Sketch out your ideas before starting and set yourself a firm goal*



data. You may well have already noticed this, often appearing as smudged area or what appear to be hairline cracks running through vignettes within the image.

Initially these are indistinguishable even under microscopic magnification. However, if you continue to edit the image, repeated saving out using the Jpeg the situation can get dramatically worse.

Soon more and more errors will appear and worst still, those which already exist can be enhanced. As a result, whenever possible always work in none compressed 24-bit format during editing and then swap to Jpeg for the final output.

*Getting on board the CD-Rom explosion via Amiga animation*



touching up finished material. A classic example of this is the Redzone motorcycle image which is comprised solely of scanned images and screen shots all composited together to form the finished graphic. Without alpha channel it would be literally impossible to produce.

As for virtual memory, this becomes invaluable on larger images. If you're only ever likely to work in video resolutions or smaller it isn't a problem. However, if you land a commission to produce a cover image for a magazine, or in fact anything that demands very high resolution, it's a must.

As you're probably aware, most 24-bit boards have a range of pre-set resolutions. If you can't scroll or select an area larger than the maximum touching-up, a final can be a nightmare and sometimes impossible.

When it comes to animation, you'll find yourself faced with a whole new collection of problems and pitfalls, not least of which is the ability to transfer the end results.

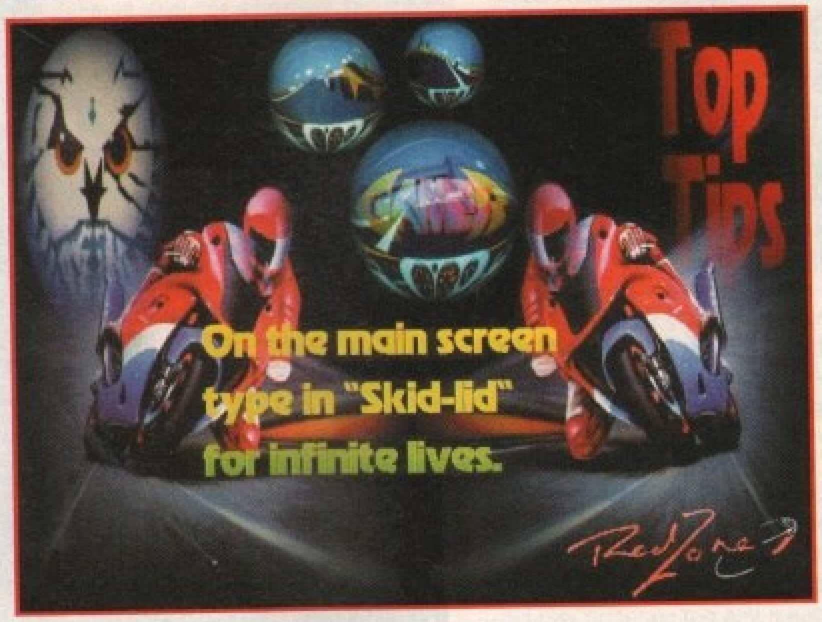
Obviously, if your finances allow, something like the PAR – or personal animation recorder – is the ideal solution, allowing you to transfer near D1 digital video direct to the recording system of the clients choice either via composite, S-VHS or component output.

## ACCESS

However, if you don't have direct access to single-frame recording equipment its worth enquiring if the client has access to such facilities. If so, you could take your machine to them and download your files via a direct serial connection – using comms software. A slow but often cheaper alternative.

If neither you nor they have a still frame facility it might be worth contacting a bureau facility such as Alternative Image – 0533 440041.

They can put your animation to tape for you and also produce 35ml transparencies and prints at reasonable cost. If the PAR




*Sometimes alpha channel support is simply essential*

## What you'll need, what they'll want

Above all else make sure you get a very clear brief of what is required. In addition, ensure you're sent a copy of the agreement on paper beforehand.

Perhaps equally important is to get a rough idea of how they want the end result to look, and make sure all the elements they're likely to add later are included.

In addition, keep in close contact with the client with regular updates on your progress and their requirements. No matter what, do not stray from the brief.

It's all too easy to get carried away and do what you think is best – remember the customer is always right, even when they're horribly wrong!

Once the ball is rolling the most important commercial element is time, they'll be working on a deadline and you'll be expected to deliver as and when promised.

It's no use griping about hard drive failures or whatever else, if you miss deadlines you're a liability and nothing more – no matter how impressive the end results.

The client will also expect the job to be complete and ready to run as soon as it arrives. As a consequence it's well worth finding out what aspect ratio and resolution would be the ideal.

If the art guy or gal at the sharp end can simply flow your creation directly into a waiting template you'll score brownie points by the bucket load. If you keep the workers happy more jobs will follow and the management will keep paying.

## Cash flow

Actually getting paid is perhaps one of the trickiest elements of freelancing. It's not that most companies won't pay, it's simply that the money is better accruing interest in their account than yours. As a result they'll try to delay payment until the last possible moment.

However, when dealing with a new client it's essential that you demand at least partial payment before starting the job. Usually it's wise to ask for between one third and half the total cost.

In certain cases they'll refuse using the "it's not company policy line." Depending on your desperation, either walk away or demand a contract beforehand and a guaranteed date for payment in full.

If you are forced in to a contractual agreement, make sure it's clear that you're to be paid on completion – and not on publication. If you don't they may simply trash your hard work at the last minute and refuse to cough up.

Once you're familiar with a company it's sometimes good PR to drop the partial payment policy and join the unwashed masses in the 30-days-to-pay department. However if you do, keep a close eye on the wall planner – not to mention the bank manager.

OK, we discussed how to get paid, but what still remains is how much. When negotiating a price it's always a good idea to

## Hard times

Part and parcel of being a freelancer is finding yourself twiddling your thumbs on occasions. As a result it's essential you try and add as many strings to your bow as possible.

If times are hard take anything that's going, it's much better to be humble than bankrupt – packing shelves, occasional bar work, anything just to tide you over until the next job comes along.

Another good idea is to get yourself a wall planner and attempt to get the work in early and spread the load a little. When one job is in progress it's downtime for all the others, and if you don't plan properly you'll at best end up with nothing to do, or at worst miss a deadline.

Once you're au fait with the finer points of a particular subject or software package, why not attempt a little freelance journalism. After all, you're selling your skills on screen, why not do the same in print and how two do's are always nice little earners.

If you have incorporated photography, videography and perhaps even music into your work you could sell your memoirs to a whole host of magazines – even this one.

Although much of the above has revolved around corporate work, it's also worth approaching local user groups, whether they be computer, video or photographic. At worst you'll pick up a few nickel and dime jobs to tide you over while also making a lot of what could become lucrative contacts.

open with the classic "well what's your budget."

That way the ball's firmly in their court, and better still you could be amazed how much some people are willing to pay. If the offer is laughable come back with an inflated counter offer around the figure you were originally after and see how it goes.

Basically common sense is the order of the day, but don't make the mistake of undervaluing yourself. If possible work out a standard hourly rate – plus expenses – and stay with it.

Remember, not many people can do this sort of work, so stick to your guns. If you're up to the mark you'll get what you deserve, either from them or someone else. Good luck...

system is something you plan to aspire too rather than invest in immediately there is an alternative. Although not broadcast quality, a combination of DCTV and Clarissa offers an excellent and affordable alternative.

Better still, it also works very well as a method of proofing your animations, either for your own benefit or as a demo of work in progress for your client.

Thanks to the composite output of the DCTV, all you need is to plug the output directly into any home VCR and you have an instant demo to pop in the post. And better still, because Clarissa produces such smooth playback you're unlikely to undermine client confidence.

## EXPLOSION

However, having mentioned the videographic uses of animation it's worth stressing there's another market that could prove profitable to the animator. Thanks to the explosion of CD-Rom there's also a huge market for intros and other graphic interludes.

In addition, there's a growing market for on-line education. Due to the expense and effort involved in producing and updating manuals and other traditional learning

> Due to the expense and effort involved in producing and updating manuals and other traditional learning material, many companies are turning to graphics.

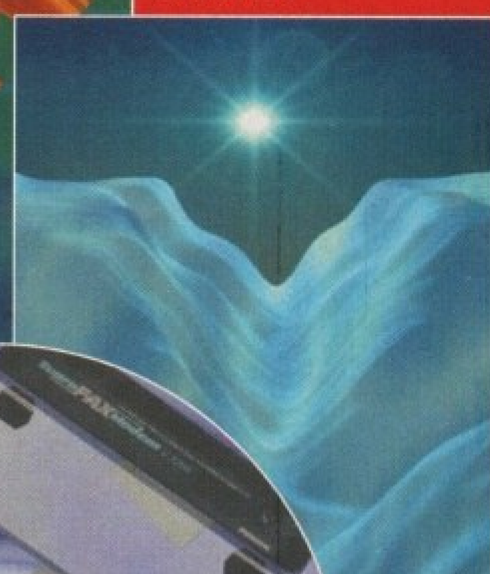
material, many companies are turning to graphics. For example, many engineering companies are now using computer animation to illustrate how to install hardware – whether it be for the benefit of their engineers or the end user.

Thanks to five seconds animation, the need for a whole chapter of expensive text is removed. All the user has to do is watch the anim spool from a hard disk or floppy and the mystery is removed.

Chips always go in the right way, nuts and bolts slide into the appropriate place and expensive tech support is slashed in a matter of seconds. This type of work may not be glamorous but it pays well and usually leads to regular work.



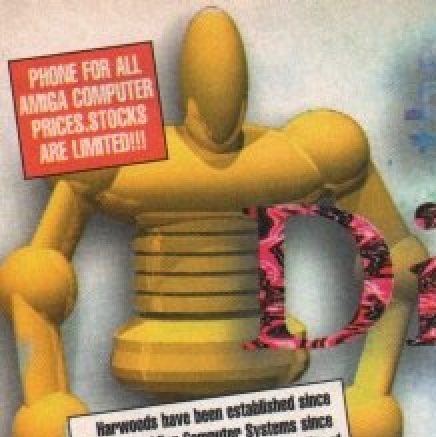





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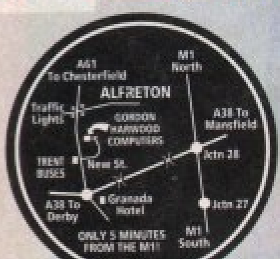
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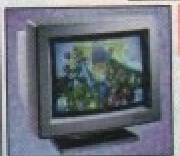
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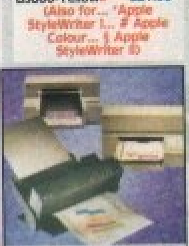
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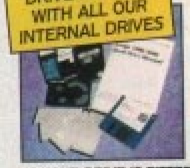
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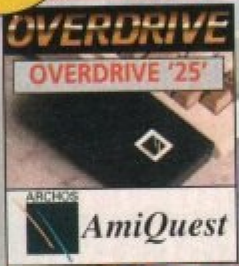
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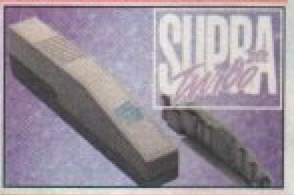
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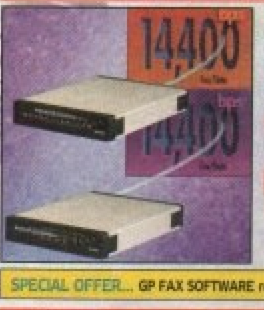
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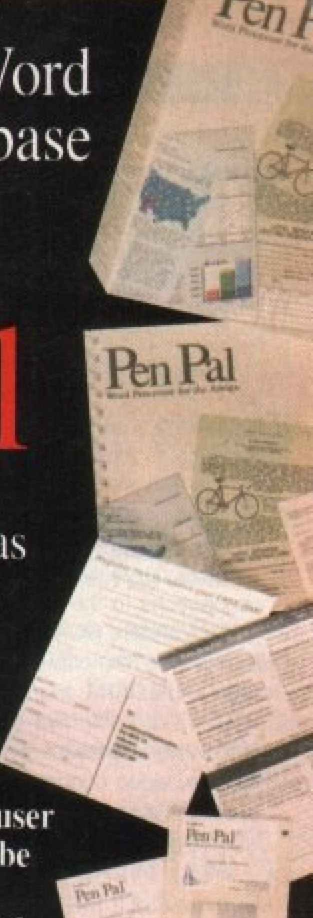
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# A work of

Pablo is designed to unite the two ends of the spectrum by bringing video capabilities to the Picasso II RTG graphics card. The Picasso II has a 16 pin expansion plug near the back plate of the board and it is to here that Pablo connects.

Once you have removed the standard back plate from the Picasso and replaced it with the one in the Pablo box that has two extra holes for the Composite and Y/C outputs, it is a simple matter to screw Pablo to the Picasso board using the supplied mounts and screws.

Pablo certainly comes well-equipped with connections to the outside world. In addition to the standard RCA jack cable for composite signals and Y/C cable, there are adaptors for BNC and SCART connections.

There are also five disks containing updated system software for Picasso allowing for the new video connection, and a copy of the excellent MainActor animation software along with some example animations.

The software installation uses Commodore's Installer and is painless, but there are two problems with it.

Firstly, it doesn't check what revision of the system software you are currently using, overwriting the newer versions I had downloaded the previous evening.

Also, while installing MainActor there are points when it wants the next disk but it doesn't tell you what it wants, merely puts up a "Proceed/Abort Install" message leaving you guessing what it is waiting for.

Informed Picasso users will no doubt be aware of the PicassoMode software available for Picasso. It allows the customisation of screenmodes to the user's desires.

To use it, rather than having the standard 38kHz or 57kHz tooltype, you put CUSTOM in the village.library icon. This then makes Picasso look for a file in the directory DEVS:Village corresponding to settings you have made in PicassoMode. Pablo comes with various monitor modes for PicassoMode that allow you to use a combination of video resolutions with monitor resolutions, for instance, 15&38kHz.

Then all non-Amiga resolutions, like 1024 x 768, are routed to your monitor, but ones like 640 x 512 are sent out of Pablo's video outputs. This brings up a serious failing in Pablo.

It doesn't come with any overscan settings. In fact the highest resolution it goes up to for video is actually 640 x 512 and it is not possible to create a 768 x 576 screenmode with PicassoMode.

## OVERSCAN

I have spoken to Blittersoft, the UK distributor for Picasso, about this and they say that Village Tronic are rewriting the screen drivers to deal with overscan.

This strikes me as a product that has been rushed out, especially as the blurb on Pablo's box distinctly states that Pablo can be used in resolutions up to 768 x 576.

And as this is the case, I can't recommend Pablo for video professionals at the moment. In fact, unless this essential problem is immediately corrected, I don't see Village Tronic selling very many Pablo boards.

The bright spark on the horizon is MainActor, which comes free with Pablo. It was fully reviewed in last month's issue of *Amiga Computing*, but if you missed that issue (where were you?) stand by for the low down.

MainActor is a piece of software for the creation of animations. Its use isn't solely restricted to Picasso as it can be used to make normal ANIM-type animations, along with foreign formats like FLCs and FLIs.

It can also be used as a conversion tool to allow you to take animations created on a PC and transfer them to a native Amiga format or vice versa.

MainActor does have a special format

## Centre of attention

In order for Pablo to create a signal that can be viewed on a television screen or recorded to videotape, it has to be at the correct horizontal scan rate and vertical refresh rate.

For a PAL signal, these settings have to be around 15kHz and 50Hz respectively. Unlike Opalvision, however, Pablo's output cannot be genlocked unless you have a TBC or Time-Base Corrector.

This is because Pablo's output doesn't really count as "computer video out" but as a separate video signal, just like that from a video camera or recorder, and it thus needs to have the stabilising influence of a TBC to make sure it syncs with other video equipment.

In the past there has always been a gap between graphics cards intended for video work and ones to aid productivity. Video cards worked only with graphics programs written especially to take advantage of their 24-bit abilities, but they were about as much use to Workbench-based programs as a bicycle is to a fish.

On the other hand, the productivity cards, or RTG cards as people like to call them, only worked at high scan rates unsuitable for video work.





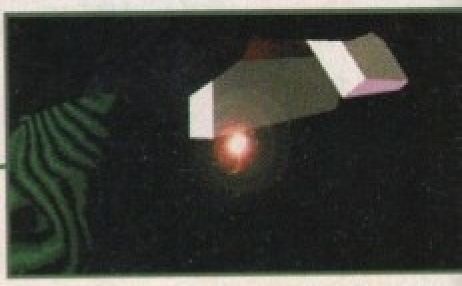


*Pablo, Picasso and their ally, Main Actor produce some effective results*









# art

*As Pablo meets Picasso, a new face in video graphics will evolve. Frank Nord explains all*

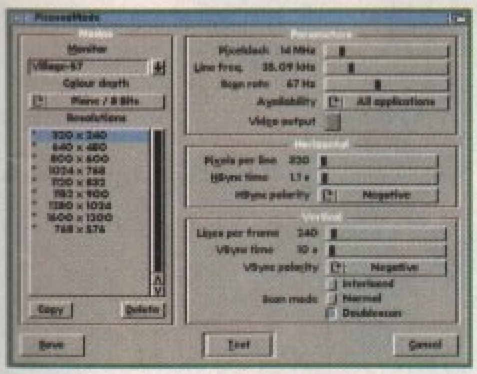
## Bright lights

One more thing. Once I had connected up my Pablo and gone back to using my monitor, with Pablo's output hooked up to my S-VHS video deck, I noticed that normal Amiga screens were of the ususal brightness on my NEC 4FG.

However, before I had connected Pablo my Picasso screens were of the same brightness. Now they were a lot darker and I spent a while fiddling with my brightness control, wondering if Pablo was worth all this hassle considering it didn't even output to the resolutions I desired.

Then, turning in desperation to the manual, I discovered that there were three jumpers on the Pablo. I had noticed them when I was installing my board, but as the manual's description of the installation process made no mention of them, I had paid them no further attention. Well, referring to the last-but-one page in the manual I ascertained that removing these three jumpers would result in a much brighter image through Picasso, but it warned me to have both the Pablo and Picasso outputs active to prevent overloading.

Since I always intended to have both Y/C and monitor output, I would have set these jumpers accordingly at the time of installation had I but known.



**Hitting the Test buttons takes you to an interactive test card screen where settings can be adjusted using the keyboard**

specifically for Picasso owners in the shape of the mundanely-named "Picasso" format. Animations in this format can be 24-bit, 16-bit or 8-bit, with MainActor automatically dithering 24-bit frames to 16-bit if desired.

File sizes aren't overlarge considering the amount of data that must be contained in each frame for full 24-bit animation, and each frame can have a different timecode, letting you set pauses within an animation without having to increase the framecount.

MainActor also has the ability to add sound to any animation in the form of IFF samples and can display animations in a window on the MainActor screen or on their own screen.

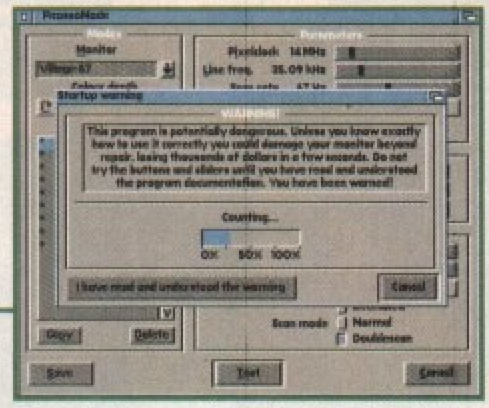
Up to five animations can be loaded at any time, and if you don't have enough ram to hold an animation in memory, MainActor does a very respectable job of playing it back directly from your hard disk.

The manual states that the version of MainActor that comes with Pablo is the full version, but you still get the annoying requesters saying "Pay the fee!" until you return your registration card, and Village Tronic then send you back your keyfile to personalise your copy.

This is a good idea in principle but I recommend that animators get their Pablos long before they need to do any work, as it seems to take Village Tronic an absolute age to send out the keyfile in question (well in excess of the normal 28 days for delivery in at least one circumstance I am aware of).

If you really can't wait or you want a full copy of MainActor right now and will settle for a black border around your animations, then go right ahead and buy one, you won't be disappointed in the quality of the video output.

A last, and somewhat disquieting observation, however; the warranty for Pablo is



**See what happens if you don't pay attention**

only six months. If it takes Village Tronic six months to come up with drivers that work in overscan and then you discover a problem with your Pablo that wasn't apparent using the old drivers, will Village Tronic replace your board?

### SYSTEM ESSENTIALS

**RED** = Essential **BLACK** = Recommended

Zorro required | Video gear required | Hard drive

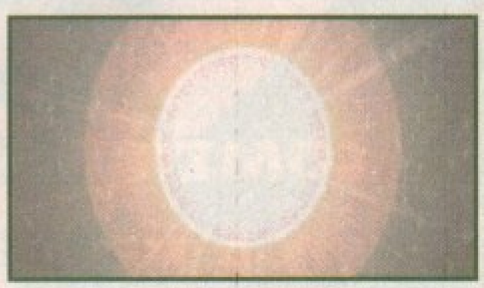
### The bottom line

*Product: Pablo*
*Supplier: Blittersoft*
*Tel: 0908 220196*
*Price: £150*

| | |
|---|---|
| **Ease of use** | **9** |
| **Implementation** | **2** |
| **Value for money** | **9** |
| **Overall** | **8** |

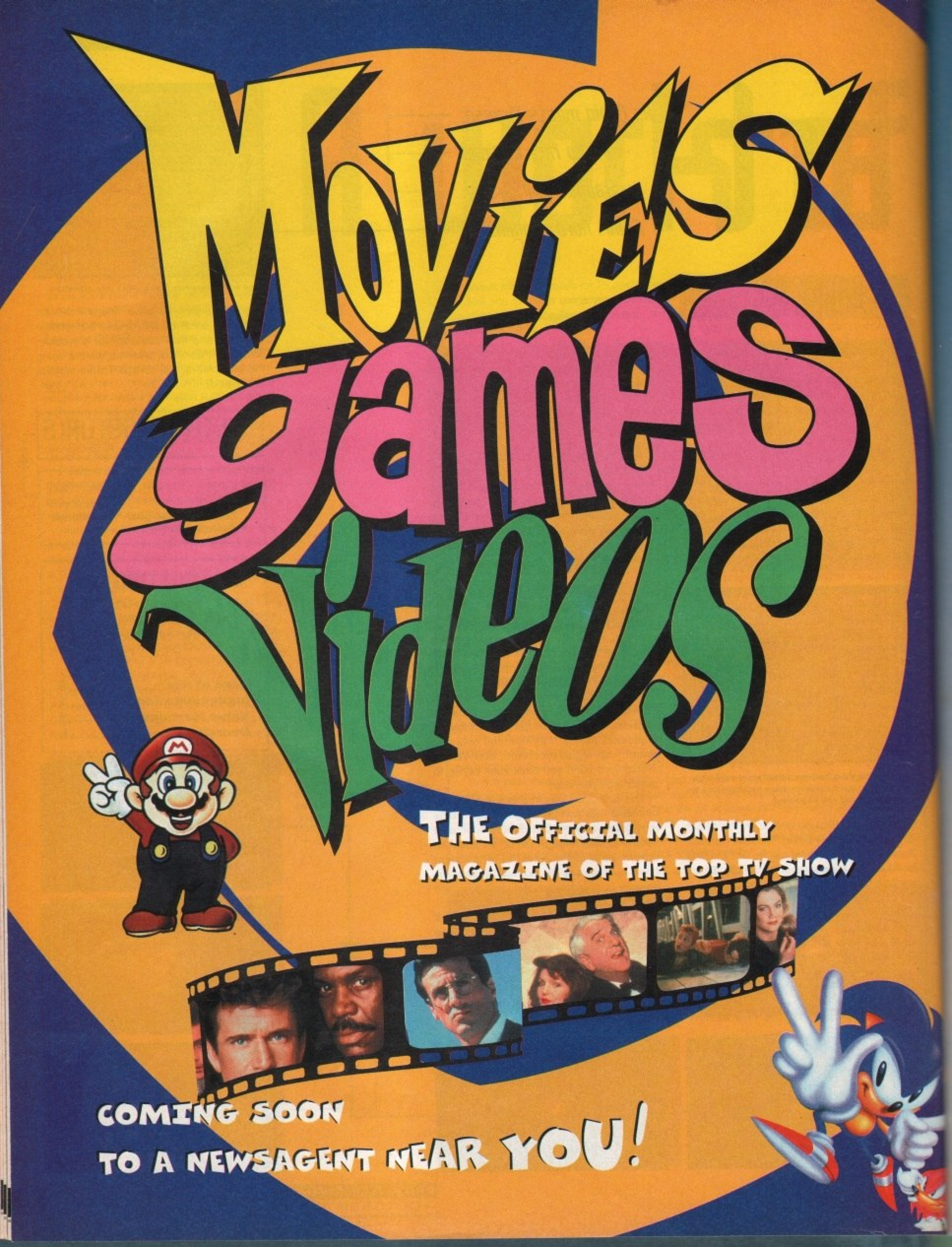











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# Digital blacksmith

*3D textures can be slower than a snail on a hot day. Stevie Kennedy tests Forge and discovers a salt-free way to speed them up*

The army of Amiga users who dabble in 3D, be it as a hobby or a way to pay the bills, have always known that getting just the right texture can be the difference between a decent image and a good one.

They've also known the frustration of rendering for hours just to try out a small change, a process which can test any user's sanity.

With Apex Software's Forge, a dedicated texture previewer and visualiser, all that is set to change. Forge is bundled with the Essence II procedural textures for Imagine 3D, and the image maps it produces can be used with any package.

At heart it is a simple program with a down-to-earth workaday job, but in productivity terms Forge is about the best thing since the maths co-processor.

Opening on a clean, no nonsense interface, Forge offers a quarter screen preview window of the textures being worked on, a variety of controls for lighting and shading preferences, and a full set of sliders to control texture attributes.

The preview window can be set to display one side of a cube (front, side, or top), or one of three views of a sphere so that the user can form a better idea of how the finished item will appear.

In addition, one can also tell Forge to display and render a spherical map, cylindrical map, or a planar repeating map. In other words, the program can automatically calculate the way an image is stretched when wrapped around a sphere or cylinder, and will compensate so that when the map is rendered it fits snugly around its parent object.

The repeating maps, designed to tile without the seams showing, are less useful, and the program sometimes produces results which don't tile well at all.

As Essence textures are what is known as "procedural" (they use complex maths rather than bitmaps to create images), Forge has to use an aspect ratio of at least 2:1, sometimes more, to create a map that will tile properly, and at these ratios some of the textures begin to look a bit stretched.

It is also easy to produce an image which tiles seamlessly in one direction but not another – something I found with the default flagstones texture.

A few minutes of fiddling can usually sort the tiling problem out though, and because using an image map rather than a procedural texture saves a lot of rendering time, perseverance is well rewarded.

Imagine's textures, augmented by Essence II, result in superb quality images, but the program can be slowed almost to a halt by the maths involved in the textures, let alone any complicated objects in the scene.

If you have enough memory (4Mb RAM should be considered a minimum), it is possible to use Forge to create 24-bit image maps and use them rather than the original texture. In this way, the Essence textures can be used, in bitmap form at least, with any package and at a much improved speed.

Unfortunately, Forge really only works with the two volumes of Essence II textures supplied with the package. It will recognise Imagine 3.0 textures and attempt to load them, but the rendered results are rather grotty to say the least.

Essence II contains enough textures that this isn't a big blow, but had the program the ability to load all Imagine textures it would have been more useful.

All this talk of rendering and creating image maps is great if you own a package other than Imagine and you're dying to get your hands on those Essence textures, but Imagine users themselves will probably be as interested in Forge's preview facility.

The quarter screen preview window displays a dithered 16 colour hi-res interlace image (256 colors are supported for users of AGA, Picasso, OpalVision, or EGS displays) which is updated in real time as the user messes around with texture settings, and this is invaluable.

Half a dozen passes are made before the window completely updates, with more detail

## The essence of Forge

Essence II isn't new, but it is still the best collection of procedural textures you're likely to find outside a Silicon Graphics workstation.

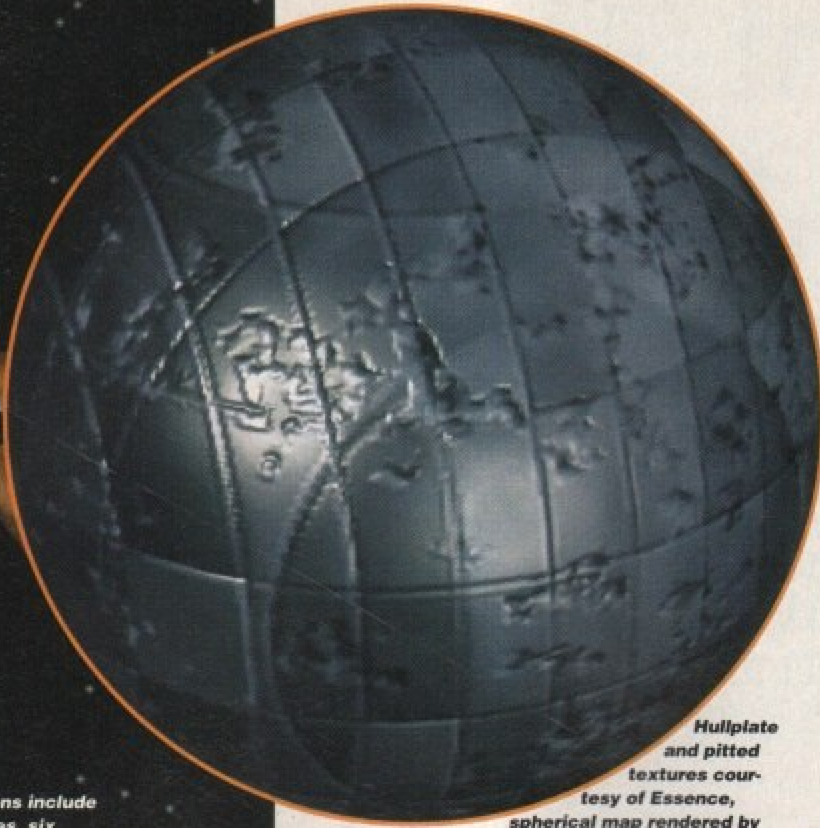
Essence II version 3.0, the version supplied with Forge, has been improved slightly in terms of rendering speed (the authors claim ten per cent), and there are now a set of 68040 optimised textures for users of the faster processor.

In total, Essence comprises of dozens of textures and literally hundreds of attribute files (surfaces to you Lightwave users) which use one or more textures to produce everything from rain to spaceship hulls and gas planets. In use they can be very slow at times, particularly those which make heavy use of bump mapping, but the results can be stunning, and no Imagine image need ever look the same again once you have a copy of Essence.

Forge makes the perfect partner to Essence in that users now have the opportunity to use textures within Imagine or to quickly render a bitmap and use that instead. This results in a superb coupling of speed and flexibility.



Rendering options include number of frames, six levels of anti-aliasing, four output formats, and an estimate of time required



*Hullplate and pitted textures courtesy of Essence, spherical map rendered by Forge, final image by Lightwave. Phew!*

added every time. However, for large global changes, such as changing the size of the flagstones in our earlier example, the first couple of passes will show enough detail that the user can more or less choose the correct setting in real time.

As this method replaces the traditional change one tiny value then wait three minutes for a quick render, Forge could justify its asking price (to Imagine users) on this score alone.

## FEATURES

Previews are aided by a number of features which, though unglamorous, are very useful. The preview window itself is controlled either by its re-sizing gadget or by the tow of buttons found below it.

Of these, there are two to double or halve the size of the window, ReSpect to force the window to adopt the same aspect ratio as the finished image, MaxSpect to show the whole image in its largest size (dependant on aspect ratio), and MaxSize to boost the window to its biggest possible size.

Below these buttons, a box shows the size of the current preview window compared to the whole image, and users can drag this box to any part of the image.

In addition, there are slider controls for zooming in and altering light intensities, and as light direction can be set from the drop-down menus it should be possible to accurately preview a texture in almost any conditions.

Animation previews can also be created and the final animation rendered from within Forge, thanks to a couple of clever features. Setting start and end frames is as easy as clicking on the buttons in the middle of the Forge screen, and changes can be made either to both at once or just one of them.

Creating a raindrops animation using the Essence II raindrops texture is then a simple matter of loading the texture, setting its built-in-time variable to one second on the last frame, then rendering 25 frames in sequence.

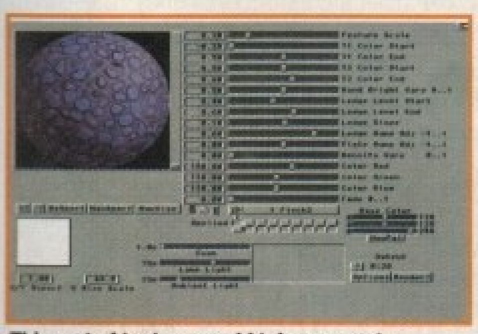
The preview itself comes in the form of a storyboard view, which can force the normal window to show up to 25 shrunken images at once. When this view is selected, a small preview box appears below the window, and clicking in it starts the animation.

Nothing could be simpler, and though it can be tricky to see any changes in the tiny anim box, this is still many times better than attempting the same job in Imagine.

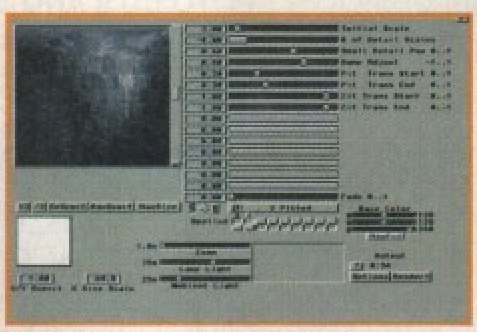
Forge will make a good guess at the time each frame is going to take to render, so if you are generating a series of large images for use as a sequential image map, the program will even tell you when it would be a good idea to nip off for a cuppa. Isn't that nice?

Without a doubt, Forge is well worth buying and virtually unmissable for Imagine owners. The speed and ease with which one can experiment not only boosts productivity but encourages whacky combinations of textures (up to nine can be used at once) and prods the user on towards creating new looks.

Lightwave and Real 3D owners won't have quite as much use for Forge, but even these users would be crazy not to give it a quick test run.



*This sort of texture would take an age to render in Imagine, but Forge will preview changes to it in seconds*



*The preview here shows a spherical map in the process of being completed for use in another package*

## Jargon buster

**texture** – a generic term for any process or image applied to a surface with the intention of altering its appearance.

**procedural texture** – a texture (in fact a small program) which has a number of built in variables the user can set to achieve limitless variety in the finished appearance.

Procedural textures produce very clean 3D effects, but because of the maths involved they can be very slow to render. Their prime advantages are memory efficiency and flexibility.

**image map** – a texture formed by taking an existing image and "mapping" it onto the target object. Image maps render very quickly, but are fairly inflexible and use precious memory.

Forge can be used to create image maps from any Essence II procedural texture, thus speeding up rendering while retaining a degree of flexibility.

**tiling** – the practice of taking a small image map and tiling or repeating it across a large surface. This process saves memory because the image map is kept as small as possible, but is only suitable for images which follow a pattern of sorts.

**spherical map** – a map designed specifically to wrap around a sphere, thus avoiding the usual squashing effect around the poles. A good example of this would be the strangely shaped planet Earth maps often found in atlases. Forge can automatically take care of pole squashing when creating spherical maps.

## SYSTEM ESSENTIALS

**RED** = Essential **BLACK** = Recommended

- 1 Mb RAM
- Hard drive
- 4 Mb RAM or above
- Maths co-processor
- Kickstart 2.04

## The bottom line

*Product: Forge/Essence II v3.0*
*Supplier: Meridian Distribution*
*Price: £79*
*Phone: 081-543 3500*

| | |
|---|---|
| **Ease of use** | 9 |
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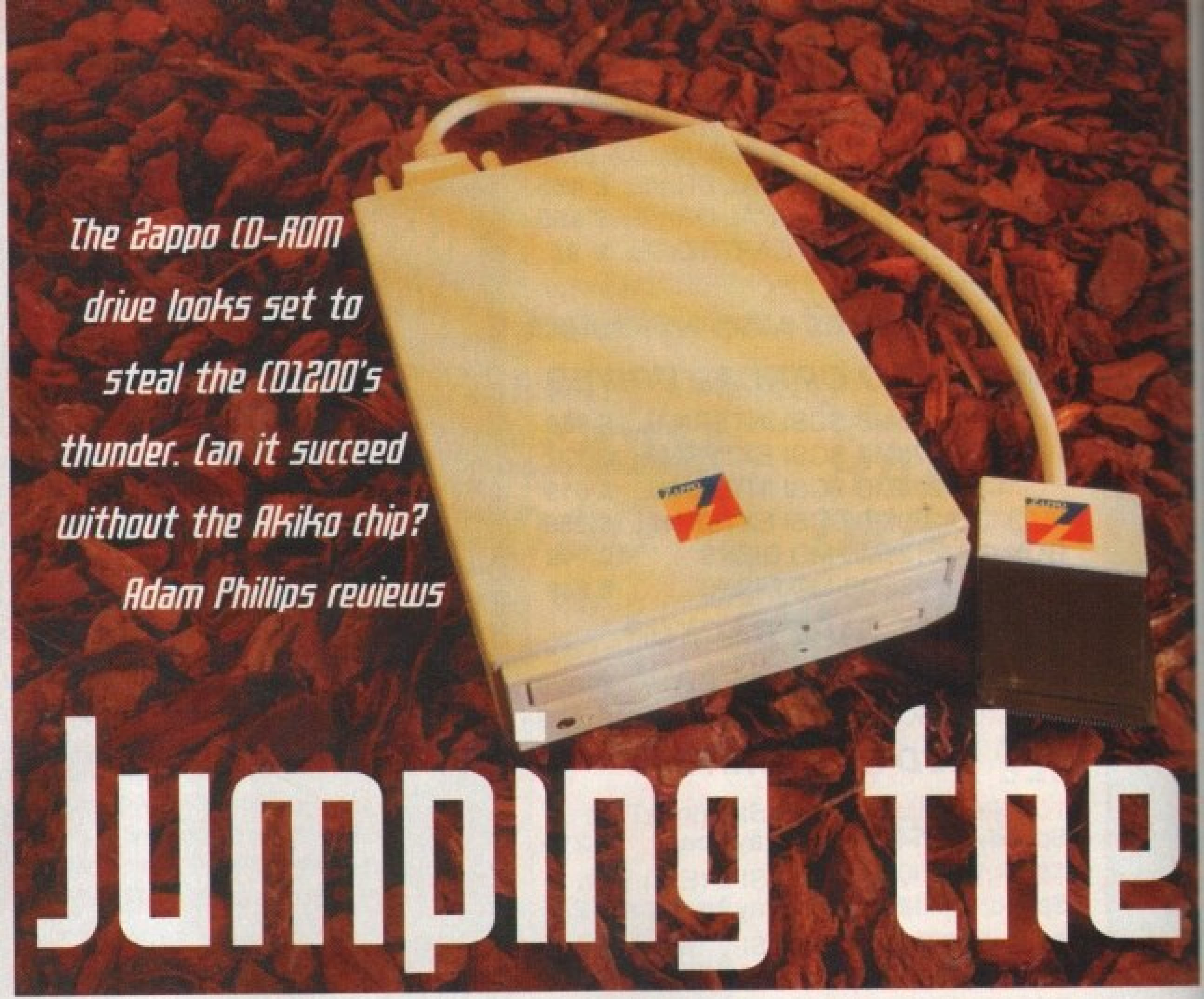
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# Jumping the

*The Zappo CD-ROM drive looks set to steal the CD1200's thunder. Can it succeed without the Akiko chip? Adam Phillips reviews*

Commodore seemed to have got it right for once.

A CD-ROM drive that 1200 owners could slip in to their Amigas and run CD32 software and applications. Then, the immediate outburst of enthusiasm began to give way to nagging doubts and, worse still, negative comments from the head of Commodore UK, David Pleasance.

While the CD1200 drive boasts the same planar chip that can be found inside the CD32, there was no option to install Mpeg.

Secondly, the trapdoor connector on the 1200 is used to house Commodore's CD-ROM instead of the PCMCIA port, which means that no matter how hard you try, there's no room in the future for upgrades via the use of memory expansions and accelerator cards.

The eagerness for the golden child of peripherals has subdued somewhat with the list of cons. Enter the independent developers – this month sees the release of the Zappo CD-ROM drive.

Available well before the official Commodore version, the machine stands an extremely attractive chance of hammering the official version into the ground. Is the Akiko chip important enough to make 1200 owner's itchy fingers wait any longer?

The Zappo CD-ROM drive seems to have everything going for it. Once brought out of its box displaying a relatively eye-pleasing design, making you feel like your money has been well spent, it's immediately noticeable, scanning the albeit brief instructions, that the drive plugs straight into the PCMCIA port. This means that the trapdoor connector is free to do with what you will.

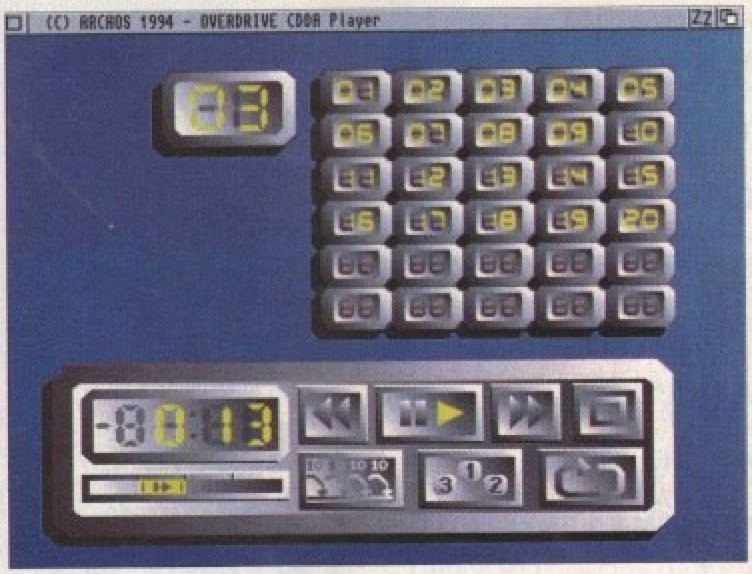
The drive itself is a double-speed Mitsumi FX001D that offers a transfer rate of nearly 300K, making it an equal match to the Sony drives found inside the CD32 and CD1200. Instead of the toilet seat pull-up lids of the latter, the Zappo has a front loading, retractable tray.

The hardware recognises the ISO9660 and was able to read a Mac CD, where as a standard PC drive couldn't. Impressive indeed.

Provided in the packaging is the connector cable, external power pack for the CD unit itself and a floppy disk worth its weight in gold. To launch yourself straight in to the delights of CD-based software, after connecting the drive simply slide the floppy in and turn the computer on.

By keeping the left-hand mouse button down, the disk will automatically load in the CD boot utility which tells your Amiga to recognise the drive.

Once done, a menu appears with three differing options for the user to select from. Either boot from the CD ( vital for all CD32 titles), rekick the machine with a custom built Workbench 3.1 emulator that allows your Amiga to recognise the drive, or boot your machine up as usual.




**Whistle while you work – Ice-T for word processing, Belinda Carlisle for graphics, Prodigy for desk top publishing. Whatever your musical tastes, the CD player offers comprehensive features and a user friendly interface**

## PURPOSE

The main purpose of the drive, other than the playing of audio CD's and taking a look at Photo CD's, is to play CD32 titles.

Using a software emulation utility instead of an actual planar chip, a majority of CD32 programs work on the Zappo drive.

*Microcosm*, *Chaos Engine* and Ultimate Body Blows are just some of the titles in respectable working order, but the likes of *Sabre Team* and *Impossible Mission 2025* are not compatible. While buying

## Music to your ears... and eyes

Also provided as part of the software are two handy utilities to add extra value for money to the package. The Photo CD displayer allows the use of Kodak pictures that can be downloaded into the Amiga and then saved out in to the hard drive or on to floppy.

The audio player is very similar to the CD32's. Slap in a disk and then select which track you want to play. The usual array of shuffle, pre-program and other features are present to provide an all-round and highly useful piece of software. The only real downside is that the player can be a little unresponsive at times, but it's nothing to hinder a potential purchase decision.

Another handy option, due to the way in which the sound leads are set up, allows the user to leave tracks playing while busying oneself with Wordsworth or ADpro. This is possible due to the Amiga audio signals and the 16-bit CD sound being fed via two phono leads (not provided) in to the Zappo drive.

Take one of them away and, with some CD games, you'll end up with only half the sound effects – Chaos Engine plays the intro sound directly off the CD but the games sound effects from the Amiga itself.

A headphone with volume control mounted on the front of the hardware has also been provided to aid your aural delight, and to keep everyone else around you going mad with the constant throbbing beat of Chaos Engine.

# CD queue

CD32 software for the Zappo may be akin to playing Russian roulette with favourable odds, if you're gagging for the latest titles the Planar emulator works well, providing a high speed equivalent to that of a CD32.

If unsure about a particular game, try and buy from a independent retailer who'll usually be more happy about bringing the title back if it is not compatible. Only time will tell if the emulation software will keep up with the hopeful increasing amount of Akiko chip-specific titles.

At £199.95, the Zappo CD-ROM drive offers good value for money and a mainly hit and sometimes miss ratio when it comes to the back catalogue of CD32 gaming titles.

> At £199.95, the Zappo CD-ROM drive offers good value for money and a mainly hit and sometimes miss ratio when it comes to the back catalogue of CD32 gaming titles.

The question burning on every Amiga owner's lips though is whether it's worth waiting for the official Commodore beast or simply to hang loyalties out to dry and take the plunge now.

Rumour has it that the official Commodore CD1200 will be released for under £200, putting it in direct line of fire with the indie machine. The main advantage that the Zappo hardware has over Commodore's is the use of the PCMCIA slot, but who's to say that on the release of the official drive, some enterprising independent won't have developed a handy expansion device that allows both the CD-ROM and accelerator cards to be plugged into the trapdoor port together.

The CD1200 will also boast the official Kickstart 3.1 on board instead of the Zappo's software emulator. As far as Full Motion Video goes, neither can do it so don't let that effect your buying decision.

The other advantage that the CD1200 has is that it will run all non-Mpeg CD32 games – there'll be no dicing with the cash at the local software emporium.

The inevitable answer to any question concerning a fair sized portion of one's earnings is to take your time.

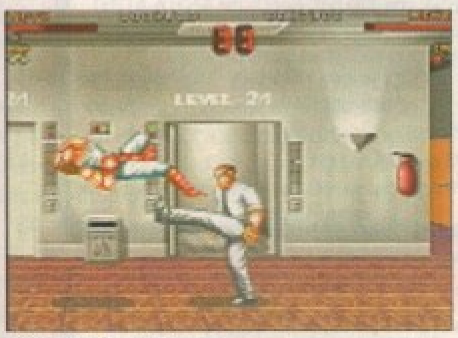
If you have to have a drive, then go for the Zappo straight away but if, like most of us, it can wait a while, the CD1200 sounds like a promising addition to the Commodore range.

## Hard drive install

For hard drive owners, the installation of the software couldn't be more simple. Boot in Workbench and double-click on the disk. Press on the install icon and the package proceeds to install itself in all the relevant directories, including the start-up sequence.

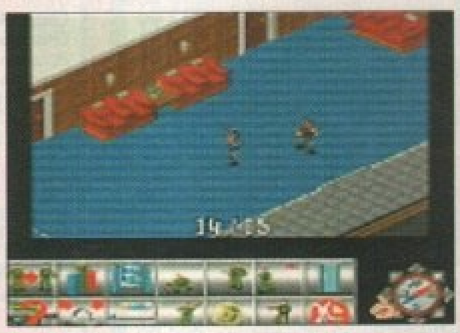
Once done, copy the Photo CD displayer and the audio CD player across to the desired directory and you're ready to roll. By following the same process as floppy users, keep the left-hand mouse button pressed down and the CD Boot program will appear, awaiting your command.

## Will they or won't they?


Ultimate Body Blows


Impossible Mission


Microcosm


Sabre Team

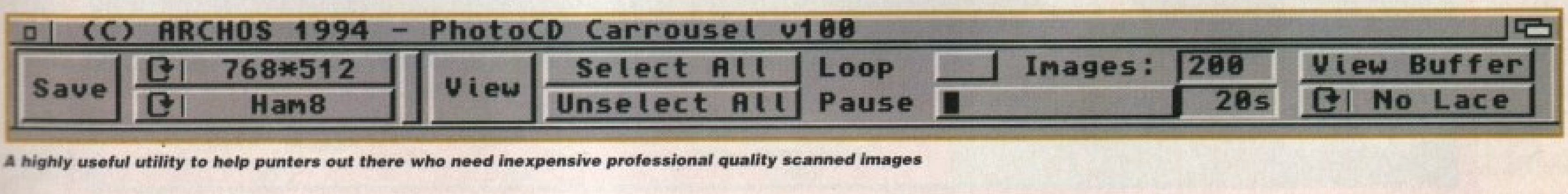
Even though the likes of Microcosm use the CD32's Akiko chip extensively, the software emulator accompanying the Zappo CD drive gives the player the full, unhindered game. Likewise, Ultimate Body Blows from the CD32 version with the all-important extra joypad buttons can be played via your A1200.

For reasons beyond the bounds of this particualr individual's understanding, both Sabre Team and Impossible Mission 2025 are non-starters. Booting up Sabre Team simply gives you the loading music and nothing else while IM 2025 plays the intro animation and proceeds to freeze up. My advice – try and check before you buy.

## The bottom line

*Product: Zappo CD-ROM drive*
*Supplier: Indi Direct Mail*
*Phone: 0543 419999*
*Price: £199.95*

| | |
|---|---|
| **Ease of use** | 8 |
| **Implementation** | 8 |
| **Value for money** | 8 |
| **Overall** | 8 |



*A highly useful utility to help punters out there who need inexpensive professional quality scanned images*




# Trails of destruction

**star letter**

It seems to me that most investigations of computer misuse revolve round pornography. Well, I have come across a disc that might change that. I haven't tested any of the things that are mentioned within this disc – how to create a bomb and how to make your own LSD – but the fact that this sort of information is available to the younger members of the computing fraternity is a concerning and worrying thought.

As to what should be done, I will leave that up to you, but I do urge you to inform other magazines of the availability of this information and to see what can be done.

*S Madeley, Cheshire*

**Unfortunately, while there is a huge problem with illegal or irresponsible material surfacing on computer screens across the planet, there is actually very little that anyone can do about it.**

**The information you draw our attention to has already appeared on a PC CD-ROM via a magazine which also included pornography as well.**

**As the information super highway and other forms of communication grow at an alarming rate, it will unfortunately become more and more difficult to monitor what is going on in the telephone lines and BBS' round the world.**

**It may sound depressing but at present, with the methods of detection available, we will just have to put up with it while keeping a watch on any material that may come our way. Spot anything dodgy and report it to the crime unit at ELSPA on 0386 830642.**

# Given the run around

It takes me a long time to get mad about things, but as I write this letter I am well mad!

Recently I decided to sell my existing system and upgrade, and after a great deal of thought went for an A4000.

The shop ordered it and phoned to say it had been delivered, so off I went to pick up my new speed machine. In the shop he set it up to try it out, it was great, well for five minutes that is until it died.

So off it went and a new one arrived in two days, and it worked fine. I took it home and for one whole week fine, but then it also died. I phoned the shop who told me they could get another but did not know when as everybody was out of stock.

However, as it had NEXT DAY on-site warranty why not phone Wang. So I did and they phoned back to ask the problem, said they were out of parts and it would be a couple of days before they could get back to me.

One week later (two weeks old) I phoned them back to see where they were, they said they were still waiting for the parts from Commodore and gave me the phone number. When I phoned them they said they would phone Wang and sort it out, and then phone me back.

One week later (three weeks old) I phoned Commodore who said they had phoned Wang who were out of parts and had not phoned me back because there was no point.

Four days later I took it back to the shop who said they would sort it out. They phoned Wang, Commodore, their suppliers and got the same run around as I did.

After one week (five weeks old) of constant badgering and hours on the phone there was a new machine on its way. But after yet another week (six weeks old) they phoned me back to say there wasn't one on its way. They then gave me my money back with the message that after I had spent £1000 on a computer, every one concerned did not care that it didn't work and couldn't give a damn.

So now I am left with a Multisync monitor, extra drives, a small fortune in software, a whopper phone bill, lost wages from the time of work and no computer.

I am feeling very bitter towards: Not Wang who cannot repair without parts from Commodore; not the suppliers who cannot supply without the machines from Commodore; but COMMODORE who could not care less about their customers once they have sold them a computer.

The thing that gets me is that the Amiga is a great computer and it's what I want. I don't want a PC, MAC, ACORN or an ST. I wanted an Amiga but am left with no faith in Commodore.

*J McKenny, Bradford*

**Unfortunately this is an all too familiar story. It's not that the A4000 is particularly prone to failure, it's simply another example of why Commodore went under.**

**In fact the story stands as a testament to the demise of CBM. Although the demand for machines has always been high, Commodore's inability to deliver is exactly why they went into liquidation.**

**Basically it's a classic tale of over expansion and a subsequent cash-flow**

➤

# Gone under, down under?

What's all this I hear about Commodore Australia and Commodore America having both gone bust? If these two companies have folded will it only be a measure of time before the one in the UK meets a similar fate? Okay, so a couple of Amiga mags have tried to reassure their readers that these problems will be sorted out in the near future, but will the company still be run along the same guidelines when (if!) it is sorted?

I am considering selling my Amiga now because I fear the worst in that Commodore are doomed to go under and if this happens then there will be nobody to continue producing this machine, leading to developers and software companies leaving it alone to die!

Do you honestly believe that Commodore can right themselves again? Your assurances (if genuine) would be most grateful.

*David O'Conner, Dinnington, S.Yorks*

**Obviously with the demise of the parent company, not to mention a major subsidiary, it's pretty tough talking about a silver lining and still keeping a straight face.**

**However, unbelievable as it may seem there's a glimmer of hope. Even though the CBM US have successfully turned a silk purse into a sows ear both the English and German divisions are still very much going concerns.**

**But perhaps more importantly they remain attractive buys for would-be investors. As you're no doubt aware, a whole host of big names have been involved in negotiations, but at present Samsung still appear to be the hot favourites – see this month's news for more details. However there's yet another twist in the tale, with Commodore's European management team also entering the arena.**

**Obviously this doesn't exactly inspire confidence given their past record, but it must be stressed that in the past big decisions came from across the pond.**

**If Commodore do buy themselves out I'm sure they'll be a lot more astute. Basically, my advice is to sit back for a few months and let the dust settle. The technology is still strong, the demand is there, all that's required is an injection acumen.**

disaster. This was due to dubious marketing – the A500+ followed almost immediately by the A600 and so on – all of which cost vast amounts of cash.

Unfortunately when demand rocketed with the release of the A1200 and A4000, Commodore were forced back to the creditors for additional cash in order to manufacture the machines the market was screaming for.

Not surprisingly they refused, demanding payment of the money already borrowed. At the moment Commodore as we know it is effectively dead, caught in a classic example of how cash-flow can kill the golden goose.

I only hope that when Commodore finally returns from the corporate wilderness they will have learned their lesson.




## Boot-up hang ups

Firstly my congratulations on your excellent magazine. Being a comparative newcomer to the Amiga, I've run into a couple of minor problems I hope you can help me with.

I've recently installed a new hard drive on my A1500, and despite following the installation procedure religiously, I get a requester for "Volume work" each time I boot from cold. On warm reboot there is no problem. It's a minor annoyance, but I obviously need to update the startup-sequence in some way.

My second problem has existed since I installed a GVP 040 accelerator. The machine hangs on the boot-up – hot or cold – after my company name appears.

I've looked at the startup-sequence, but I'm not clever enough to see what could be the causing the problem. I hope you can proffer a few words of advice.

*N Condron, Music & Motion, Brighton*

**Well you've certainly come to the right place with the first question as we have our very own cold boot problem on one of our A3000.**

**In our case the problem appears to be the initialisation time of the drive. The 3000 in question runs an 040 which attempts to boot the machine very quickly.**

**Unfortunately the hard drive in the machine is a fairly slow replacement with can only manage a 17 millisecond access time. As a result, when the machine boots the 040 boots-up before the drive is up to speed, it therefore asks for a boot disk to be installed.**

**But as in your case, once warm rebooted the problem disappears. It might also be worth checking out the boot priority of drive in relation to any others on your system – assuming you have a second hard drive.**

**We decided long ago that it added character and as it never caused a problem it should be left alone – if it ain't completely broke don't make things any worse – *an old computing adage.***

**Messing about with your startup-sequence isn't a very likely cure as your machine simply isn't getting that far into the boot sequence. So my advice would be to stick with the Vulcan death grip once a day just like we do.**

**As for your second point there is a solution. Firstly ensure the view command you use is before IPrefs in the startup-sequence.**

**Secondly ensure that the view command is running as a background task. Fortunately there's a few methods to achieve this. You can either use runback or Brun – both of which are small utilities widely available in the PD.**

**However, if you can't be bothered sifting through the PD there is an AmigaDos alternative. Simply add the line *run* >NIL: <NIL: followed by the path, the command name, and the file name.**

*Got something to say through the pages of AC? Ezra Surf is our mailman, dedicated to reading your letters and selecting the most interesting for publication. Drop him a line at:*

*Ezra Surf's Postbag , Amiga Computing Adlington Park, Macclesfield SK10 4NP*

*Please don't enclose saes as Ezra just hasn't got enough paper to reply personally. He might also have to shorten your letters, so don't be offended if you end up getting the chop.*

## Sounds great

I have in the last couple of months purchased an Amiga 500+. It's the first computer I have ever owned and to date have mainly used it for games. I have been offered a 40MB IDE hard drive which has led me to wonder about the Amiga as a sequencer.

In the past I have used dedicated Modules such as the Korg M1, but now I'm wondering how good the internal sounds on the Amiga can be? So, I'm writing to you for advice.

What I would like is a sequencer program that runs high-quality internal sounds from an external Midi keyboard. I've been playing round with the OctaMed program, and though this software is restricting and 1MB sounds leave little to be desired, it got me thinking.

If I had 40MB, could I get sounds that equal Modules like the Korg M1? I need a program that has effects like reverb and chorus and the ability to pan internal sounds across the stereo field, as well as having at least 16 tracks with full edit.

I buy your magazine every month and a few weeks ago a friend gave me the CoverDisk from an issue back in '93. On it was Bars&Pipes which is the closest to the program I'm trying to find, yet I could find no way of running internal sounds from an external source, nor could I pan the sounds across the stereo field. Am I hoping for too much? Will the Amiga run with an IDE hard drive and, if so, can I find the kind of sounds and program described?

*Mr Camish, Bucks*

**The internal sounds on the Amiga are only 8-bit and, as a result, they can't match the 16-bit synthesis of the M1. There does seem to be some confusion on your part about the difference between hard drive space and RAM.**

**Amiga samples are almost always stored in RAM, therefore it's a RAM expansion that will most suit your requirements. Reverb, chorus and the like can only be added via sample processing software such as Audition4 or Audio Engineer. Once the desired effect is added they can then be used in your production.**

**Your suspicion about Bars&Pipes is correct – the full version allows complete integration of 8-bit samples into midi productions via a set of specialised tools which ship with the package.**

**By the way, IDE hard drives will work but you'll need an IDE controller as well. I believe Gasteiner sell edge connecting IDE controllers separately which would do the job.**

## Dirty dealings?

As a proud Amiga owner I thought it was necessary to write to your magazine so you could warn other Amiga owners about a PD company that owes me 28 disks for a deal we made, and I have waited more than six months for and not received the disks! The deal was as follows;

They offered to swap ten PD disks for each commercial title that is sent to them, so I sent five of my commercial disks – all boxed – hoping to get 50 PD titles in their place. I have only received 22 of the 50 disks from them.

I tried calling the PD library – which is a small PD library owned by a man and his family – and the man who answered pretended it was a wrong number!

I am 100% sure it was the right number because I called the same number again and he answered with the name of the library in question.

I would appreciate it if you could warn your readers about the potential risks involved in such transactions.

*Sharif Al-om, Yateley, Surrey*

**Well, first of all I must say that because it proved impossible to contact the library – and therefore hear their side of the story – it was only fair to remove the name of the library in question.**

**However, even without naming names this does raise an interesting point. In the early days the PD provided a small island of socialist ideals in a sea of commercial software.**

**But like everywhere else, big business has invaded this utopian isle. And inevitably, in its wake came the usual small group of undesirables.**

**Basically the moral of this story is to get some form of written confirmation from the vendor before posting anything.**

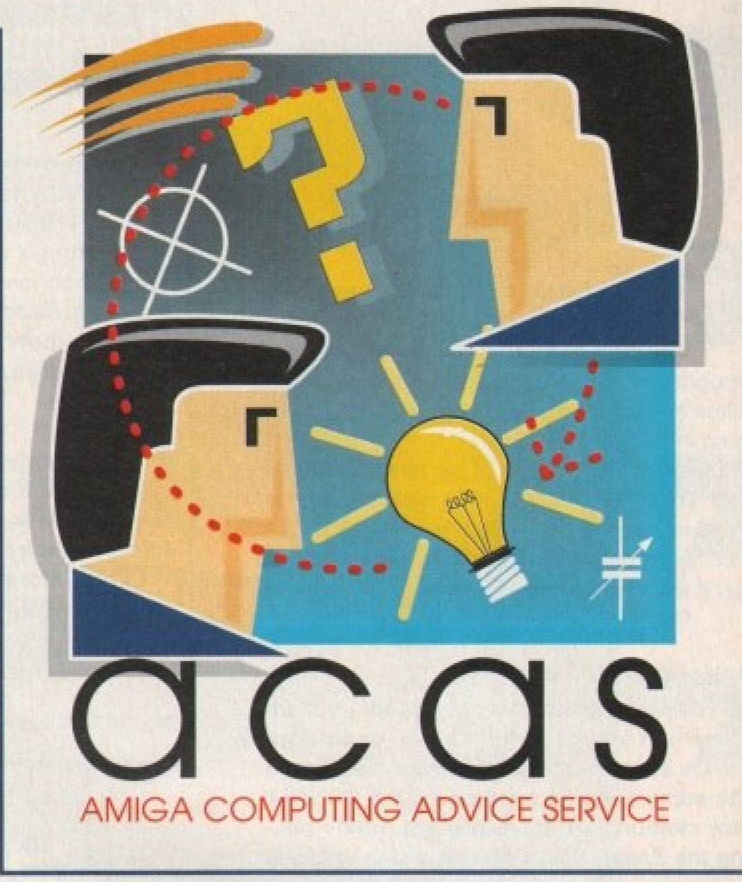
**At least then you'll have a fighting chance in the small claims. If the argument comes down to your word against theirs anything could happen. It's even possible that they could make a counter claim for deformation of character.**

**Obviously, written confirmation isn't always a realistic option when ordering just a few disks, but when serious money is involved it's madness to rely on word of mouth alone.**

**As far as ordering PD in general is concerned, it's wise to stick with the bigger libraries or those which advertise regularly in the magazines. Obviously this tends to precludes the smaller libraries.**

**However, this doesn't mean they should be ignored. Simply use a little caution until you're confident of their ability to produce the goods.**

# Yet another mixed bag of computer worries comes under the surgeons knife in time for a speedy recovery




## Workbench magic

As a user of Magic WB (of which I have had no problems) I am very keen to create some Workbench and window images that users can load into WBPattern in the Prefs directory.

As I understand it, only a maximum of eight colours can be altered, even if you use a 256 Workbench. So how can I create images in DPaint if I don't know what colours are being used?

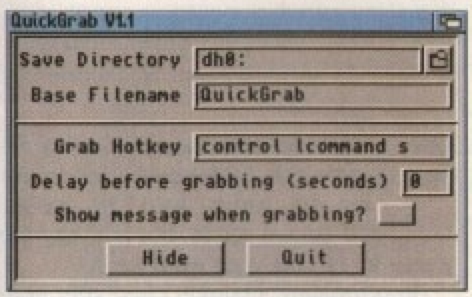
*J. Redman, Brighton*

**Commodore should have offered the facility for A1200 owners to edit all the colours in the Workbench palette, from two to 256 colours.**

**My suggestion would be that you try and get hold of some screen grabbing program which will allow you to grab an image of the Workbench screen, colours and all.**

**You can then load the image into DPaint and save the palette out so that you can apply it to any patterns you create.**

**There are two very good screen grabbers for the Amiga and these are Quickgrab (which we use to grab pictures for the magazine) and ScreenX. Both of these programs are available in PD listing, so check the adverts for more information.**




***Quickgrab will allow you to grab a screen from your Workbench, therefore allowing you access to the palette***

## Window explosions

Along with a group of friends, I am creating a disk-based magazine for graphic artists, 3D and 2D. As we know very little about AmigaDOS we decided to use the *Amiga Computing* CoverDisk contents in order to create an auto-booting disk.

Another reason for using your CoverDisks is that they use a very useful Shell window at the bottom of the screen which we needed to include.

It is the Shell window where our problems arise. When this window appears it does so at full screen size, that is 640x256, which is obviously no good at all.

I understand it is the Winsize command that allows you to alter the dimensions of a window, but for some reason it just does not want to work. We are using A600s and each have 1Meg RAM expansions. Is there any reason why this isn't working?

*M. Wavell, Bristol*

**The first problem you've got is Workbench 2.0. The Winsize command was originally written for Workbench 1.3 and was not modified to be used with Workbench 2.0. So how do we do it?**

**The trick here is to install the disk you are using with a 1.3 bootblock. If you know anyone with an A500 you should be able to get hold of the 1.3 Install command. You may even find it in the C directory of our CoverDisks as well. The Winsize command seems to clash with 2.0 bootblocks.**

**Once you have access to it, you should rename the install command Install1.3 and copy it to your C directory.**

**Whenever you next format a disk that you want to use the Winsize command with, type in the following in your Workbench Shell:**

```
install1.3 df0:
```

**This will create a 1.3 bootblock on the disk in df0: which will allow you to run**

➤

## AmigaGuide or Multiview

At present I am writing a piece of software that will allow Amiga owners to change the look of their Workbench windows. The program is nearly finished so I have started to write the documentation.

As I own an A1200 I have decided to use the AmigaGuide format with Multiview. However, I realise that Workbench 2.0 doesn't support Multiview, so I am now using the official AmigaGuide program which both Workbench 2.0 and 3.0 users can use.

Unfortunately, every time I load the file into AmigaGuide it crashes my machine.

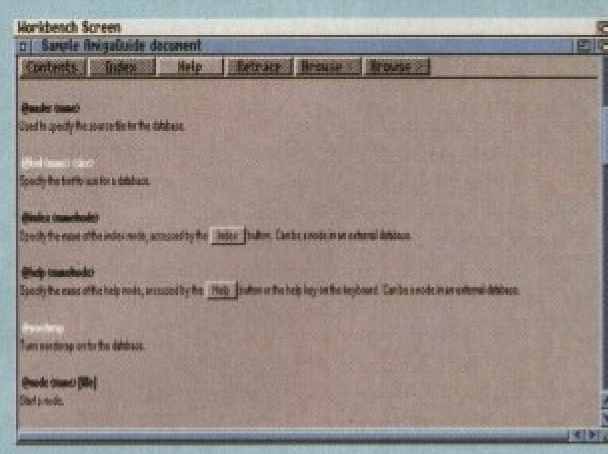
*M. Clarke, Newcastle*

**In my experience, and contrary to the associated documentation, AmigaGuide is not totally compatible with AmigaGuide style tags.**

**When I received my AmigaGuide package a Sample.guide was provided which shows the different tags and their effects. This works fine in Multiview but looks awful in AmigaGuide in which none of the tag effects show up.**

**If you have any text formatting tags such as @{b} or @{i} you should remove them, as they do tend to have a damaging effect. The @Wordwrap command also fails to work in AmigaGuide and text tends to flood of the right edge which you need to scroll.**

**Another error occurs in Multiview when a word or series of words that have style tags have to be word wrapped. For some reason the information is simply split across two lines and whatever the letter was where the split occurred disappears. My advice would be to stick with the standard ASCII document until AmigaGuide is improved.**




***Multiview works almost bug-free but AmigaGuide seems to be fraught with problems***

the Winsize command successfully. Don't worry, your disk will maintain compatibility with Workbench 2.0 and above.

## Which slots wot

I have an A1200, 120Mb hard drive with an 8Mb fast RAM (Blizzard 1200) expansion in the trap door. I bought this powerful set-up so that it would allow me to use my HP 550c printer for dabbling in DTP.

I really would like one of the new CD-ROMS that attach via the PCMCIA slot. Would the trapdoor expansion interfere with the PCMCIA slot? I called Indi Direct and they said no. Silica say it would.

*A. Stephen, Bellshill*

**If you own more than 4Mb of 32-bit RAM you may have problems because the extra memory resides in the same address location as the PCMCIA slot memory. We have been currently testing the Zappo CD-ROM with a 4Mb upgrade and have had no clashes with RAM expansions or accelerators.**

**Commodore's official 1200 CD drive should be out in about two months but this will plug into the trap door expansion, making accelerators and RAM boards totally redundant (that's Commodore for you).**

**My advice is to take a long look at the Zappo as it is by far the best option so far – just remember that you will be limited to only 4Mb expansion. For more information contact Indi Direct Mail on 0543 419999.**

## Workbench won't wait

Why is it that when I copy files into my WBStartup drawer and then re-boot my Amiga a message appears shortly after Workbench loads informing me that the application has not quit and should it wait some more.

This is really annoying me as I am fairly proud of my Workbench. I own an A1200.

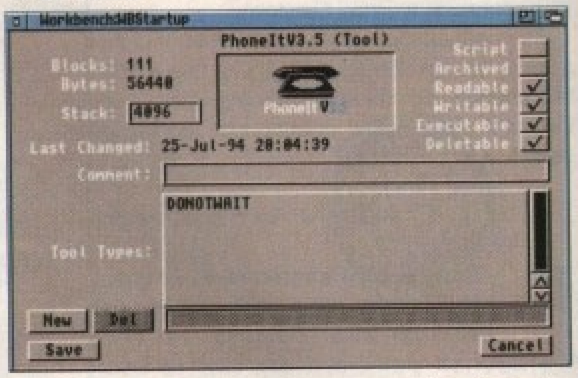
*C. Burns, Devon*

**If only all ACAS letters were this simple. Click once on the program icons you have in your WBStartup drawer and select Information from the Icons menu option.**

**In the Information window click on New to create a new Tool Type and then type in:**

```
DONOTWAIT
```

**Save this down and you should have no more problems. The DONOTWAIT command is a system command that tells Workbench to ignore the program once executed and carry on with any other tasks.**




***DONOTWAIT will allow Workbench to continue its tasks while loading programs in the WBStartup drawer***

You got problems too? Then drop a line to Amiga Computing Advice Service, Europa House, Adlington Park, Macclesfield SK10 4NP and we'll move heaven and earth to help in these columns. But sorry, we cannot reply personally, so save those SAEs

## Reach for the skies

I sympathise with K. Leemer (Issue 77) with respect to Beneath a Steel Sky on the A1200. However, rather than throw the game disks around the room and waste a very good game in the process, how about trying this handy tip?

The problem lies with the AGA screen on the A1200. In order to play the game without an AGA screen follow these instructions:

1. Boot the A1200, holding down both mouse buttons to enable the set-up screen.

2. Select Boot with no startup-sequence.

3. Move to the root directory of Beneath a Steel Sky on your hard drive by typing:

```
cd (path of B.A.S.Sky)
```

(for example cd Work:Games/SteelSky)

4. Type:

```
SteelSky
```

5. Enjoy a bug-free game of Beneath a Steel Sky.

*A. Hutchinson, Northumberland*

**I would have thought that to disable the AGA screen mode you would have had to select Enhanced screen mode, but you say this works so I'll take your word for it.**

**Unfortunately, I couldn't test your solution as it takes about ten years to actually install the thing. Thanks anyway.**

## More storage

When the A600 first came out I decided to purchase one that included a hard drive. Admitting my lack of foresight, I bought an A600 with only a 20Mb hard drive. A 20Mb hard drive was totally sufficient at first, but since that time I have become more proficient with my Amiga and its software and now find I am seriously running out of room.

I have tried LHA to compress data but find it so annoying having to decompress it again for just one picture, or sound sample. Besides forking out for an new and bigger hard drive, is there any other option I can consider?

*D. Johns, Rhyll*

**I can understand your dilemma, a 20Mb hard drive is simply not enough, especially as Workbench and its associated files can eat up a hell of a lot of that space.**

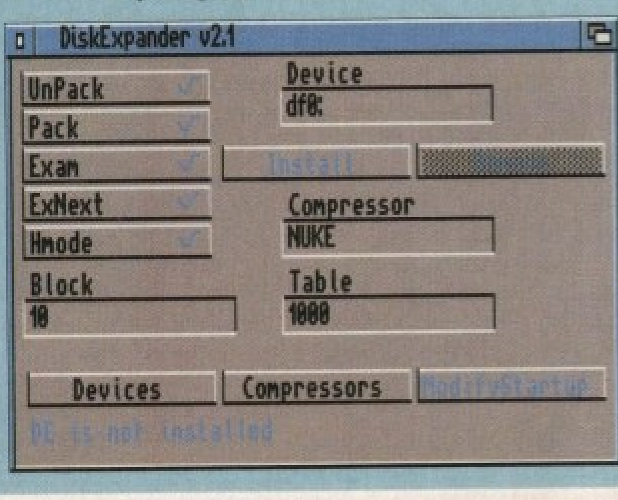
**There are solutions, however. It would be wise for you to consider a larger drive in the future – nothing less than 65Mb – but there are programs that will increase your storage capacity without the need to spend large sums of money.**

**The best packing and de-packing programs are PowerPacker 2.0 and Disk Expander. PowerPacker will simply crunch files and auto-expand them when they are run.**

**Disk Expander will crunch entire hard drives using some very fast and powerful crunching algorithms. It is totally invisible to the user and can be instructed to compress files as they are copied to your hard drive. The only time it can prove dangerous is when the user fails to follow the instructions correctly.**

**In certain circumstances, Disk Expander has been known to increase storage by 50% which is quite amazing.**

**Unfortunately, I couldn't locate exactly who it is that is distributing PowerPacker Professional these days, but DiskExpander is available from Power Computing on 0243 273000 for only £35.**




***Disk Expander can increase your hard drive storage capacity by up to 50 per cent***

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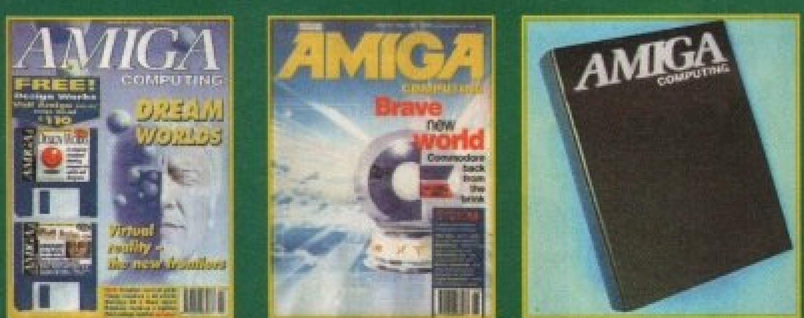
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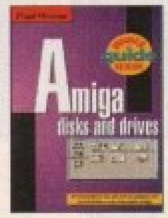
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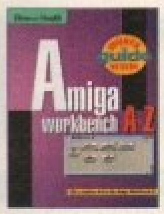
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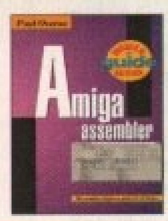

This book is suitable for all Amiga users and is the definitive guide to the Amiga's floppy and hard disk drives.

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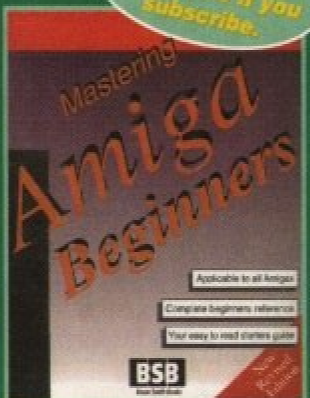

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### ● Zool 2



This widely acclaimed game follows Zool's travels through a further six huge levels, larger than those in the original, that feature a number of different ways of completion.

Zool has new and special abilities, including expert climbing skills and is now accompanied by his pet dog, Zoon. With great sound effects, hidden bonus rooms, highly intelligent enemies and the choice to play Zooz, Zool's girlfriend (shown here), Zool 2 makes an excellent free gift.

Zool 2 is suitable for any machine, though A1200 owners can choose an enhanced version (see order form).

Save £25.99

# Pure

As far as 2D design goes, Deluxe Paint from Electronic Arts had, up until recently, held the crown, but with the advent of Brilliance from Digital Creations all that changed. Now, Brilliance has been upgraded and looks set to leave DPaint even further behind.

Brilliance 2.0 not only features a superb and fully illustrated manual but also two versions of the software, Brilliance – which is a register version allowing you to paint in 2, 4, 8, 16, 32, 64, 128 and 256 colours – and TrueBrilliance – the same program which is specially written to handle HAM screen modes easily and quickly.

DeluxePaint tried to combine both these attributes in one package but the result was a program which worked fine in register mode but tripped and slipped in HAM. Taking a step back to the manual, Digital Creations have provided tutorials for the beginner and a quickstart section for those used to DPaint.

Also provided is a very thorough reference section which provides examples from almost all the tools available. When compared to the DPaint manual it is slightly less informative, but Brilliance is such an easy program to use there isn't much call for hefty explanation.

*There is very little demonstration artwork supplied but what there is of it is very high quality*



## SUPERIORITY

Users of the previous Brilliance package will already have been convinced of its superiority over DPaint and Personal Paint, but for those users still working with these packages a fair amount of convincing is going to be needed, especially as DPaint has become the default art package for Amiga artists.

Unlike DPaint and Personal Paint, Brilliance takes a new approach to the pull-down menu style of option selection and offers a variety of panels which are stacked at the bottom of the screen.

Combine these with the hotkey definitions which can be assigned to panels via the keypad and you've got a powerful and flexible design interface which is quick to access and totally programmable.

The program offers all the tools and options available in DPaint and more. Digital Creations have definitely thought long and hard about Brilliance and seems to have perfected what so many other companies have failed – a paint package that superceeds DPaint in all respects.

Tool wise, Brilliance is literally overflowing with familiar, and some not-so-familiar, drawing methods that make image creation a breeze. In fact, this is certainly one of the most attractive areas of Brilliance – its user friendliness.

Animation, stenciling and gradient fills have also been included in Brilliance but have been much improved over DPaint. Unlike DPaint, Brilliance has the ability to tween brushes – that is to take a starting image and end image and then fill in the necessary images in-between.

Certainly, two of the most annoying problems in DPaint are the single Undo and



*All the features associated with Deluxe Paint are available, and plenty more besides. The magnify is extremely versatile*

# The personal

On the continuing battle for the ultimate 2D graphics application, Cloanto have returned into the fray with Personal Paint 6.0, battling against the now ageing Deluxe Paint 4 and the crown holder Brilliance 2.0.

From the outside, Personal Paint looks identical to its forerunner 4.0 featuring the now customary, and much appreciated, Commodore installer, making installation a breeze.

And to all intents and purposes version 6.0 looks identical when loaded. However, a quick flip through the menu and the differences become instantly recognisable.

Probably the most major additions are the new animation facilities. Animation has had a long-time association with Deluxe Paint and Brilliance but only now have Cloanto included it with their paint package. Unfortunately, the animation is severely lacking in flexibility and design. A very useful storyboard window has been added, allowing the user total control over how his or her animation runs, but there is nothing that rivals DPaint's Move requester or Brilliance's tweening ability.

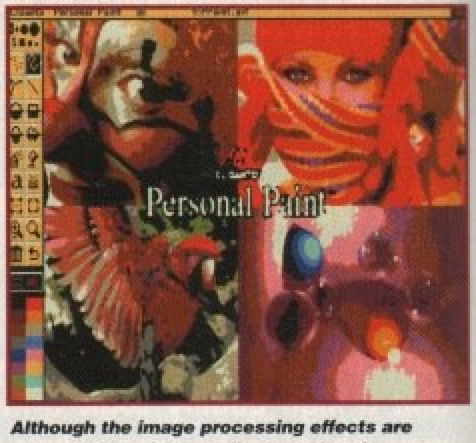



*This is an example of Personal Paint 6.0's colour remapping abilities. The quality looks great even with only 16 colours*

Any animation techniques must be applied by hand. There are some very useful additions, like new compression ratios which can reduce the size of an animation dramatically, and the ability to create animations with varying palettes and frame by frame timing which have been neglected by DPaint and Brilliance.

Multi-palette animations are extremely useful and can be viewed externally by using View V3.6 or ViewTek which are available from most reputable PD libraries.

Personal Paint 6.0 also features a very useful virtual memory option in which inactive image data can be stored for later retrieval. The size of the virtual memory is totally definable but is automatically defined by the program when there is a memory shortage.




*Although the image processing effects are many and provide excellent results, they are painfully slow even on accelerated Amigas*

When a memory shortage occurs, Personal Paint 6.0 will 'clean up' the virtual memory, leaving only the most recently used item – the less used material being stored on disk. When images within the VM need to

# Brilliance

*Steve White test drives the latest version of Brilliance to find out what all the fuss is about*

toolbox fill and draw modes. The latter fails to fill or draw underneath the area occupied by the toolbar, when it is present. Imagine drawing a circle that disappears underneath the toolbar. When the toolbar is removed any image under it is erased.

DPaint also supplies only a single undo option and if the toolbar is enabled after a mistake, the undo facility has no effect.

## ATTRIBUTES

Brilliance to the rescue. Not only does Brilliance perform all drawing functions under the tool panels but also has a definable amount of undos, restricted only by available memory. These attributes, and many more, can be edited in the Brilliance icon's Tool Types. You can even select the default pathnames for pictures, animations and brushes etc – something severley lacking in DPaint. Interface aside, Brilliance is also a damn sight faster than DPaint and Personal Paint and can perform some operations faster on a 68000 than DPaint can on a 68020.

True Brilliance, the HAM version makes working in HAM (Hold And Modify) a pleasure, something that DPaint tried desperately to manage but failed so miserably.

For Brilliance upgraders the differences between the previous version are mostly invisible. The drawing routines have been rewritten and are now a lot faster as a result of customer feedback.

New animation formats have also been supported and apart from the standard ANIM5 format, also include Op-5, Op-8 (Word), Op-8 (Long) and single frames.

Most of these formats are not fully supported yet, but when they are Brilliance will be at the front of the queue as far as compatibility goes.

### Verdict

There is certainly no doubt that Brilliance is the most competent 2D package available for the Amiga, and Electronic Arts will have to provide something very special with DPaint 5 if they are to claim back their crown.

I have been using DPaint ever since the first version but since using Brilliance it has been removed from my hard drive, and is unlikely to ever reappear.

AMIGA BLUE CHIP AWARD

### The bottom line

*Product: Brilliance 2.0*
*Supplier: Meridian*
*Price: £84.95*
*Tel: 081-543 3500*

| | |
|---|---|
| **Ease of use** | 9 |
| **Implementation** | 9 |
| **Value for money** | 9 |
| **Overall** | 9 |

# touch

*Can the latest version of Personal Paint tackle the might of Deluxe Paint 4 and Brilliance 2.0? Steve White finds out...*

be displayed, they are done so automatically.

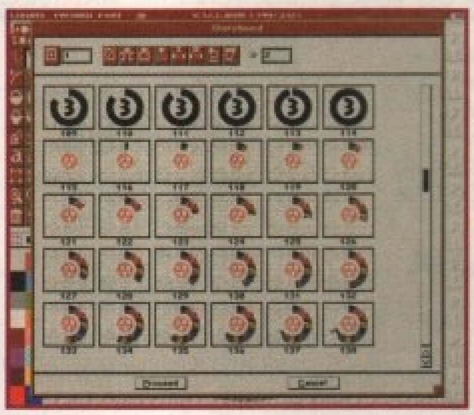
Cloanto have now added support for Retargetable Graphics boards such as Picasso, Retina, Rainbow, EGS and Talon, which allows users of these boards total access to all Personal Paint 6.0 features in an environment where the board is used to full potential.

## ADDITIONS

As well as these new additions, Personal Paint 6.0 still features its plethora of image processing functions as well as a few new additions including transparency.

As far as image processing in a 2D art package goes, Personal Paint 6.0 still holds the crown. The down side of these image effects is that they are painfully slow, even on a A1200 with 4Mb Fast RAM and an 030 accelerator with FPU.

Still one of the most powerful attributes of this program is its colour remapping ability which is rivalled by none other. A great example picture is supplied with Personal Paint 6.0 and shows about six high quality images, obviously with different palettes, combined into one with only a slight degradation of quality.



***The animation requester features frame thumbnails allowing you total control over how your animation is created. No tweening or move requesters, though***

Not so wondrous you may think, but when you consider that this image is only 16 colours you can't fail to be impressed.

### Verdict

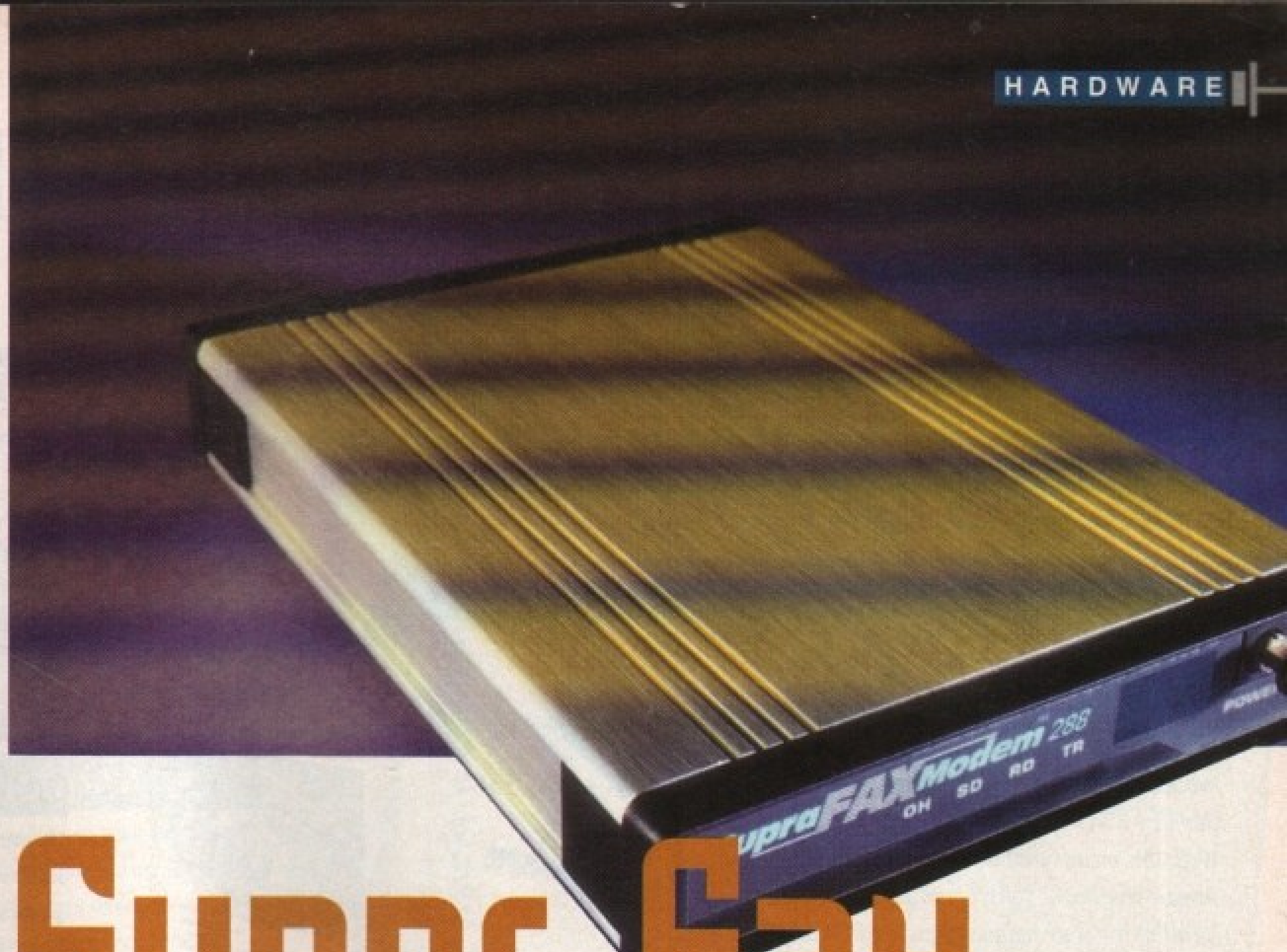
As far as users of Personal Paint 4.0 are concerned, V6.0 is a welcome upgrade, especially with the addition of animation. However, Cloanto still have to go quite a distance before they rival animation features as seen in Deluxe Paint 4 and Brilliance 2.0.

As far as value for money is concerned, Personal Paint 6.0 is still very good but Cloanto must seriously consider animation aids and perspective before their next release. If they can maintain the price tag they could be onto a winner.

### The bottom line

*Product: Personal Paint 6.0*
*Supplier: Ramiga International Ltd*
*Price: £69.95*
*Tel: 0690 770304*

| | |
|---|---|
| **Ease of use** | 7 |
| **Implementation** | 7 |
| **Value for money** | 8 |
| **Overall** | 7 |




# Super Fax Modem 288

*Phil South takes a look at one of the new Supra UFast modems, clocking in at a blistering 28,800 baud*

It only seems like a short while ago that a 2400 baud modem was a pretty fast thing, and you know, after you had one for a while you began to wonder how you ever managed without it.

Then 4800 baud modems came out and you began to wonder about your concept of speed. These were very shortly followed by 9600 and 14400 baud modems, and in what seemed like a quarter of the time.

So sure enough we find ourselves in the present looking down both barrels of a 28800 baud modem. Who'd have thought it? And not only is it double the speed of the modems we are all using, but it's only £285.53, rather than the £600 you used to have to pay for a 14400 when they first came out.

The pace of technology is a baffling thing, and it seems a bit worrying to buy anything like this in this day and age when it's becoming alarmingly apparent that almost everything we buy for our Amiga is almost out of date before we wrestle it out of the box.

## IDENTITY

You'd be forgiven for mistaking the 288 for a regular 14400 modem just by looking at it, as it's enclosed in the self-same brushed aluminium case with black ends. But it's a very different beast inside.

What you are in fact looking at is a 28800 baud modem (I still get a kick out of saying that) which runs at 28800 baud for data, 14400 for fax (although I've yet to encounter a fax which runs faster than 4800 or 9600) and MNP modes 2 to 5 plus mode 10.

What this means in plain English is that as far as data transfer is concerned, this thing sends stuff before you press the send button – it's that fast.

The MNP part relates to Miracom Neworking Protocol and is a form of data error correction and compression which allows for faster and more reliable operating speeds.

MNP 2-4 is what is also known as LAPM or V42 and this is an error correction method, which means that checksums are sent and received by modem and remote host to ensure what is sent is complete and not corrupted by line noise.

In the days before this standard we spent more time on-line saying "please re-send, line noise," and comms was less like an Information Highway and more like a tatty CB club.

Then MNP 5 came along and not only were you error corrected but you had a 2:1 compression going too, so everything was faster. MNP 10 is a new protocol which allows for cellular connection, and is a much tougher error correction format for those nasty buzzy things that men in suits have growing out of their ears in trains. (Cell phones, not hairs, you big dummy.)

Another exciting thing (in among all the other things to get happy about in this great new cevice) is that it can initiate and adapt to rate changes.

## SPEEDS

Not impressed? Okay how about the fact it can change operating speeds mid call. Yes, it can change gear on the fly, and that's worth a yelp of glee if nothing is.

There are copious other benefits, but unfortunately not much Amiga software exists to take advantage of them. For future reference (and for the benefit of anyone who'd like to support these features,) it can distinguish between fax and voice calls, using a process called Adaptive Answer.

A nice bonus for those of us who are always getting our ears cleaned out by having a fax screech down the phone at us.

## Hey, bonus

So is it the bee's nose? Well, it's a very fast piece of kit, and up to Supra's usual high standards of manufacture. Obviously it's too new to speculate about ROM problems similar to those which dogged the 14400 for so long. Only time will tell on that score.

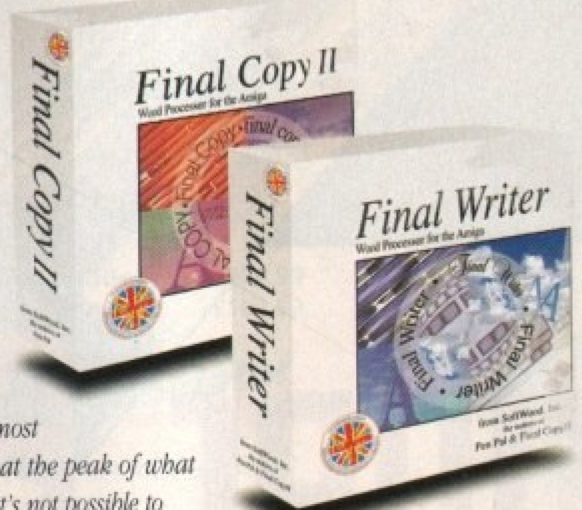
I did hear that ROMs in this case are actually EEPROMs, which can be re-programmed by software upgrade files. You do get the usual nicely printed and pretty rationally written manuals which tell you the technical stuff, but also point out all that you *really* need to know.

So is it a bargain the size of a hippo's bum? You betcha. And if I hadn't just shelled out for a 14400 only about 10 months ago I'd be on the blower to First Computer Centre (0532 319444) right now to order one.

# At SoftWood we have o

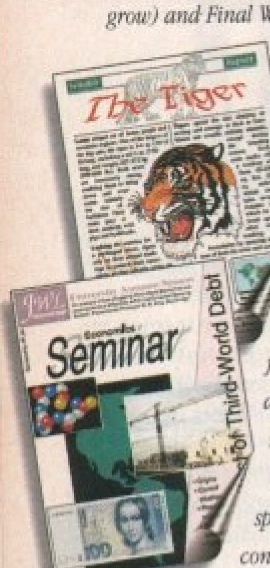
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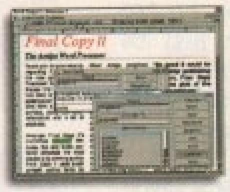

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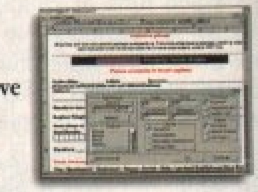



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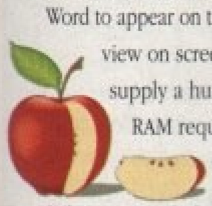
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## NEW Final Writer Release 2

*Final Writer* was launched last year with the power user in mind. It is the Amiga's only Hard Drive compulsory word processor - neither performance nor features have been compromised to maintain compatibility with floppy drive only systems. As well as having a unique list of features for the author of longer documents and publications - automatic indexing, table of illustrations, table of contents and bibliography generation - *Final Writer* with its **TextBlocks**™ was the first word processor to put a character (or group of characters) anywhere on the page, at any size and any angle. It offers a virtually unlimited ability for effects with graphics *and* text. Just like *Final Copy II*, *Final Writer* also includes **PerfectPrint**™ and has a set of tools to create structured graphics with new **FastDraw Plus**™ (now with additional functionality that includes new options like rotation). And... you can also access features unique to SoftWood with both the new **Touch Tools**™ & **PowerUser Bar**™ "one-touch" technologies. Simply 'clicking' a button, means you can define, change and save such things as the 'Paragraph Styles' (ie. Font, Font Size, Text Position, Bold, Italic, Underline etc.) and 'Layout Options' (left, right, centre or justified, bullets, line spacing, indents etc.). The options you have through single button selections are nothing less than remarkable! Indeed, one magazine heralded these as "the closest thing to Microsoft Word to appear on the Amiga"! Also uniquely, *Final Writer* can import, scale, crop, view on screen and output structured PostScript EPS clip-art images (we supply a hundred free with the package) to *any* printer (>2mb system RAM required). And... if you own a PostScript printer *Final Writer* is the only word processor with a set of output options including scaling, crop marks, thumbnails, and half-toning. Combine features like ARexx/Macros and **Text Clips**™, with others new to *Final Writer*, including floating palettes and UNDO/ REDO (on text, formatting *and* graphics actions) - and you have... ***Final Writer Release 2.***



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## Tabby graphics tablet

There will be a great deal of you out there who, having tired of the boundaries placed by lesser paint packages, would like to move into the heady realms of 24-bit.

The problem? Achieving this standard of work requires large financial investment in the shape of a dedicated graphics tablet.

The cheaper solution has always been to use a stylus that fits directly into the mouse port. Unfortunately, this would-be mouse emulation has always struggled to generate any real feel or accuracy.

However, Tabby could be the answer to all Amiga artists' dread. It's a graphics tablet that offers the precision of a serial device with the ability to diversify through a range of packages.

Having said this, when Tabby first emerged from its box I was more than apprehensive about the working area that the user is given – 128mm by 96mm.

But, despite the apparent lack of space Tabby works surprisingly well. The stylus responds incredibly well, and sits very securely in the hand.

Far from feeling cramped, the tablet performs perfectly and gives the user confidence to attempt even the most intricate of tasks.

In the looks department, Tabby is very well groomed. The whole tablet tilts at a shallow angle, and sits snugly on four rubber legs. The angle of the tablet definitely makes work lighter, and the legs really anchor it to your workstation.



The business end of things, in the shape of the stylus, is connected to the tablet via a cable. Ergonomically, the stylus feels very natural and extremely comfortable in the hand, with the front end squared off with a rest to accommodate your forefinger. In addition, a small metal strip sits above this rest with the sole purpose of providing a means of earthing the pen, thus minimising the magnetic distortion that can occur.

Another advantage of Tabby is that because it fits into the serial port and uses a driver system which installs, you can use a standard mouse in conjunction.

I found Tabby to be a very economical way of achieving impressive results using a system that encourages a natural ease, and should bring the best out of any pixel artist. In fact, this could be the Tabby that finally caught the mouse, and got the cream.

Supplier: First Computer Centre
Phone: 0532 319444
*Price: £49.95*
*Ergonomics: 7*
*Speed: 7*
*Overall: 8*

# Alternative input

*Looking to update some of your existing peripherals or just fancy trying out something a little different? Simon Clays guides you round the mousetraps*

## AlfaOptic optical mouse

One of the biggest problems Amiga owners are going to face using the contemporary opto-mechanical mouse is blockage. This normally occurs when the internal plastic rollers become contaminated with dust and fluff.

The net result is a complete headache with the mouse sticking or moving erratically. One solution is nothing more than a good clean out, the other is to take rollers out of the equation totally, and go optical.

An optical mouse reads dot information from a special mouse mat, instead of using rollers. However, while you won't have many problems with dirt, the movement on optical mice has been criticised for lack of feeling, and they have the notorious habit of losing their whereabouts when moved too quickly. But what about the Alfa optical mouse?

Well, on the catwalk (shouldn't that be mousewalk?) of ergonomics it's not the most graceful looking animal. It has a bulky look that gives the user expectations of a sturdy mouse. The reality is that Alfa is really quite light and feels fairly insubstantial.

The Alfa also comes with a handy little holder so you can attach it to the side of your monitor. This seems more of a gimmick than a practicality but who's going to really moan; after all it's a freebie.

It also lacks the grace that the Gasteiner dpi 400 has, and feels fairly uncomfortable when used. Buttonwise, you've got three, rather than the standard two buttoned mouse.




This is for the benefit of our PC counterparts to a large extent, but there are Amiga applications out there that can utilise this feature. The acid test came when we decided to try it out on DPaint. What a let down.

After feeling fairly comfortable on desktop operations, it came as some surprise to find out that the optical mouse stuttered and stammered around the drawing window and struggled intensely to produce anything like a smooth arc or circle, despite its 300 dpi.

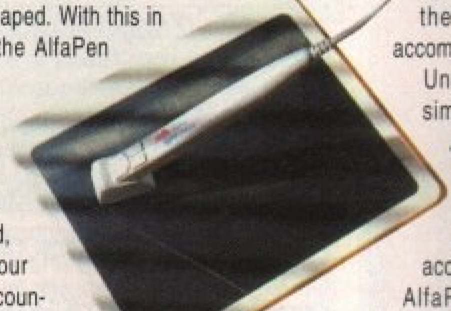
As a small comparison we decided to try out the Gasteiner 400 dpi immediately afterwards. The difference was striking and made my mind up which I would choose, whatever the problems with clogging.

If you do work in an extremely dusty environment, or are just dead set on an optical mouse, then the Alfa is worth a look at, but it would also be advisable to examine the Nashka range.

Supplier: Golden Image
Phone: 081-365 1102
Price: £29.00
*Ergonomics: 4*
*Speed: 5*
*Overall: 3*

## AlfaPen Optical Pen Mouse

Along with clogging problems, the other dilemma some users find is mouse control. After all, when using an art package, attempting to draw accurately with a mouse isn't as natural as using pencil shaped. With this in mind, Alfa Data have released the AlfaPen optical pen mouse.



The optical pen employs a similar system to the standard optical mouse. It reads its position via an infra-red beam which, using a horizontal and vertical grid, converts the information into your screen position. Like its optical counterpart, the AlfaPen uses a three button approach when in use. Located at what we'll call the nib end, the largest of the three buttons acts as the left mouse button.

Behind the largest of these buttons sit two other smaller buttons. The button on the right hand side acts in the same capacity as the right mouse button, while the left button gives you that extra dimension when using applications that allow its use.

AlfaPen doesn't feel too bad in the hand – it's light and not at all cumbersome when you use it. However, when you attempt to use the buttons, implementation is not so easy.

The buttons are very closely grouped, and even the most coordinated and dextrous of you will struggle to use this arrangement proficiently.

If I gave the AlfaPen the benefit of the doubt I'd say that its use could be described as a little like using chopsticks – totally alien at first, but the more you use them the more accomplished you become.

Unfortunately, the AlfaPen suffers similar problems to its companion. Again, DPaint became the benchmark test, and while AlfaPen feels more natural to draw with, the arcs drawn had no particular accuracy and felt jerky.

AlfaPen also suffered when moved around the mat too suddenly. Despite its 300 dpi, it struggled to locate itself.

Also, when you're using the AlfaPen you have a tendency to angle the pen back, like it was a real pen. Unfortunately it's not, and the net result is a loss of contact to the mat.

Ultimately, however much you might feel you need an optical pen, when you get one up and running you might just feel that you've wasted your money.

Supplier: Golden Image
Phone: 081-365 1102
Price: £34.00
*Ergonomics: 5*
*Speed: 6*
*Overall: 5*

## Gasteiner 200 DPI mouse

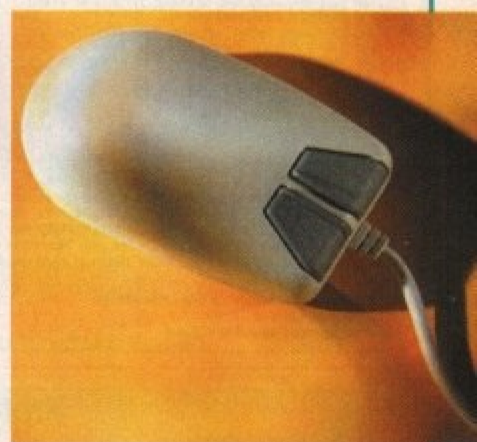
Although the Commodore mouse has come on leaps and bounds thanks to the A600, A1200 and A4000, there's still plenty of room for improvement.

This is more than apparent if you plan to use your mouse in conjunction with an art package for anything in the artistic vein. Many of the mice available to the user can set you back anything up to the region of £20 for something that exists within the 280-290 dpi range.

Certainly Silica's Nashka, which is a sturdy all rounder, and the squared off Contriver mouse slot nicely into this bracket.

With this in mind, Gasteiner launched a 280 dpi mouse that retails at the bargain price of £6.99. Okay, it uses membrane switches as opposed to micro-switches to co-ordinate its buttons, but it does have many saving graces.

For one, it's damn good value for money –



who could moan at this price? If anything, it could put you off because it's too cheap. Well, I assure you there's nothing to be frightened of.

Gasteiner's budget rodent feels extremely comfortable to the touch and fits the ergonomics of the hand very well. It feels very sturdy and your fingers reach the two buttons with ease.

The other aspect to consider with this mouse is its aesthetic qualities. Although it's a simple design it looks robust and the two deep grey mouse buttons offset the light grey of the main body very effectively.

On the down-side, opto-mechanical design means the occasional cleaning of the ball and roller, but again, that's only a short and very temporary inconvenience.

Overall, Gasteiner have produced a mouse that, although technologically outwitted, can live alongside its rodent counterparts when it comes to accuracy and overall performance.

Supplier: Gasteiner
Phone: 081-345 6000
Price: £6.99
*Ergonomics: 6*
*Speed: 5*
*Overall: 6*

## Gasteiner 400 dpi mouse

The Amiga was one of the first home computers to use the now commonplace means of interaction between the user and the computer – the mouse.

Previously, movement had been carried out via the cursor keys, a system that made the relatively simple mouse seem light years ahead technologically.

But, since the implementation of the mechanical rodent, what further progress has actually been made? Well, not much really, aside from cosmetic things like lead length, free game and novelty mice teeth painted on to the side of your handset.



Perhaps the greatest single step forward was the improvement of dpi (dots per inch) speed, which governs how much horizontal and vertical information the Amiga can pick up per inch of space.

This always costs that little extra, with most people using the mouse for standard practices feeling it an unnecessary luxury. Well, Gasteiner's 400 dpi mouse knocks all of that into touch. Its £15 price tag makes it just about the cheapest 400 dpi mouse on the market. But, as a customer, what is the price you pay for this economy? Simple, none. Gasteiner's 400 glides across the mat with a grace that leaves other rodents and cavys floundering in the straw.

It tracks across the screen with such ease that you hardly need flick your wrist, and the space necessary to operate it is negligible.

On the ergonomics front, again the Gasteiner 400 dpi is a treat. Its small body is much sturdier than you'd believe its price would command, and sits in the palm of the hand very comfortably.

Control is finite and the micro-switches respond with the slightest muscle spasm from your forefingers.

A slight niggle might be that some users would find it too sensitive, but for my cash the Gasteiner 400 dpi is an excellent tool to use alongside any DTP or art package.

Supplier: Gasteiner
Phone: 081-345 6000
Price: £14.99
*Ergonomics: 8*
*Speed: 8*
*Overall: 9*

# Let's do the Blitz

## PART 2

*Following in the steps of the first tutorial, Michael Milne takes you through opening your own screen and creating your own menus!*

As discussed in the first tutorial, the screen is the basic drawing board for all your visible operations within the workbench environment. But, instead of using the workbench screen, I am going to show you how to use your own screen by taking you through the steps of writing a basic picture displayer. (Ooooooh)!

As you are probably familiar with, the Amiga is capable of displaying pictures or information in many different modes. Such modes include Lores, Hires, Interlace and even HAM. I can't explain all these modes in this article, so I will just use the two most commonly known modes: Lores and Hires.

- **Lores**: This is the lowest display mode for the Amiga to use and is the preferred drawing mode of most graphic artists. In Lores mode the Amiga can display 256 lines from top to bottom, with each line consisting of 320 dots. In this mode the standard Amiga 500 can display a maximum of 32 true colours, where as the Amiga 1200 can display 256 true colours.
- **Hires**: As the name suggests, this display mode is a higher resolution than the Lores mode (but not the highest resolution possible). In Hires mode the Amiga still only displays 256 lines from top to bottom, but each line now consists of 640 dots from left to right.

Unfortunately, in Hires mode the Amiga 500 can only display a maximum of 16 true colours, but the Amiga 1200 can still display its full quote of 256 true colours.

Let's kick off the programming by opening a standard screen in Lores and then Hires:

```
WbStartup
```

;We are still using the WB system.

```
Screen 0,2
```

;Here is our screen.

```
MouseWait
```

;Wait for a mouse press.

```
CloseScreen 0
```

;Close our screen in a system friendly manner.

```
End
```

That's it! Not much to opening a simple screen, is there!

If you have been reading your manual, you would have realised that to open a simple Lores screen which has dimensions of 320*256 pixels, you only need to use the shortened version of the 'Screen' command.

This version assumes that you want Lores, so all you need to do is to tell it how many bitplanes you want (the number of bitplanes dictates how many colours can be used by using the following maths:

2^Bitplanes = Number of colours, ie. 2 bitplanes = 1*2*2 = 4). The first value represents the screens id number.

Well this is all fine for a Lores screen but a Hires screen such as the WB screen requires some extra thought. We need to use the extended form of 'Screen', so replace the previous 'Screen' command with the following:

```
Screen 0,0,0,640,256,2,$8000,"My Screen",1,2
```

If you check your manual you can see that the first two values after the screen id number is the X,Y position. These values are relative to the top left-hand corner of the screen (ie. 0,0 is positioned in the top left-hand corner).

The next two values are the width and height of the screen in pixels as explained above. After that follows the number of bitplanes and then the screenmode value.

This value is related to a chart in your Blitz User Magazine No.1 on page eight, which shows that a value of $8000 gives us a Hires display. After that follows the name of our screen and then the drawing pen number and background pen number which represent the two colours used to draw the screens display.

Try experimenting by opening some screens of different sizes and resolutions with varying number of bitplanes. Remember:

Amiga 500 = max 32 cols = 5 bitplanes max
Amiga 1200 = max 256 cols = 8 bitplanes max

Now lets go one step further and add a picture. This example relies on you having a picture somewhere which you can use. Please make sure that it is either a Hires picture or a Lores picture only:

```
WbStartup
MaxLen fi$=64
```

;Max length for filename.

```
MaxLen pa$=128
```

;Max length for filepath.

```
Screen 0,2
```

;Open a basic screen.

```
Repeat
```

;Start of main loop.

```
f$=FileRequest$("Choose a picture!",pa$,fi$)
```

;Ask for a picture.

```
If Exists(f$) Then ILBMInfo f$ Else End
```

;If it exists then analyze it.

```
CloseScreen 0
```

;Close old screen.

```
Screen
0,0,0,ILBMWidth,ILBMHeight,ILBMDepth,ILBMViewMode,"
",1,2
New screen
LoadScreen 0,f$,0
```

;Load picture.

```
ShowPalette 0
```

;Show palette.

```
MouseWait
```

;Wait for mouse button.




*Wow! An IFF picture requester. Select a picture and load it up*

```
Forever
```

;Repeat forever.

In this example all we have done is set up a few variables, opened a default screen, repeatedly asked for a picture to show and then wait for the mouse button before looping around again.

Notice that we use the ILBM commands to find out the picture size, depth and viewmode

If you have the latest copy of Blitz 2 featured on Blitz User Magazine No. 6 then you can change the line:

```
If Exists(f$) Then ILBMInfo f$ Else End
```

to:

```
If Exists(f$)=False Then End Else If ILBMInfo
f$=False Then End
```

This is because you have the new version of ILBMInfo which returns True as it is a picture. If you haven't got the new version then see the subscriptions box on how to get it!

All we need to do is add a few menu options and we'll have a good picture displayer. But, first a few basics about menus:

- Each menu is split into sections, a title, an option and a sub-option.

The title is as the name suggests, the name of a particular menu. In each menu is a selection of options which the user can choose from and some options also act as titles to sub-options. This is what a typical menu structure could look like:

| Menu | Title |
|---|---|
| Option 1 – | Sub-option 1 |
| Option 2 – | Sub-option 2 |
| Option 3 | |

- Each set of titles, options and sub-options in Blitz 2 are assigned a unique id number just like screens and windows. This makes the grouping of menus as easy as pie.

Setting up a menu is just like defining a variable in Blitz 2. There are three commands: MenuTitle, MenuItem and SubItem.

Each of these allow the declaring of each part of a menu and gives you the power to group these with the unique menu id numbers, thus allowing you to create several sets of menus for different parts of your program. One thing to remember about menus is that they need to be attached to a window because of the way the workbench sets them up (Sorry, that's the way it is).

But don't despair, we can set up a dummy window, which can't be seen by the user. All we do is define our menu, set up our screen as before but add a window without a title and without borders. This makes for an invisible window!

So let's get on with the last part of this issues tutorial:

```
WbStartup
MaxLen pa$=160
```

;Our file vars:

```
MaxLen fi$=64
ev.l=0
```

;A long variable to get the user input.

```
MenuTitle 0,0,"Project"
```

;The menu titled "Project."

```
MenuItem 0,0,0,0,"Load a picture  ","L"
```

;The menu item "Load."

```
MenuItem 0,0,0,1,"Quit","Q"
```

;The menu item "Quit."

```
Screen 0,2,"Use menus"
```

;Our default screen.

```
Window 0,0,10,320,246,$800,"",1,2
```

;Our invisible window for the menus.

```
Activate 0
```

;Activate our window.

```
SetMenu 0
```

;Add our menu.

```
Repeat
```

;Start of our loop.

```
ev.l=WaitEvent
```

;Wait for user interaction.

```
If ev=$100
```

;Has the user used a menu?

```
If MenuHit=0
```

;Is it our menu?

```
If ItemHit=0
```

;Is it the load option?

```
f$=FileRequest$("Choose a picture",pa$,fi$)
```

;Ask for a pic.

```
If Exists(f$) Then ILBMInfo f$ Else End
```

;Get IFF info.

```
CloseWindow 0
```

;Close old window.

```
CloseScreen 0
```

;Close old screen.

```
Screen
0,0,0,ILBMWidth,ILBMHeight,ILBMDepth,ILBMViewM
Use Menus",1,2
Window 0,0,10,ILBMWidth,ILBMHeight-10,$800,"",1,2
LoadScreen 0,f$,0
```

;Load the picture and palette.

```
ShowPalette 0
```

;Show palette.

```
Activate 0
```

;Activate window for menu.

```
SetMenu 0
```

;Add menu.

```
Endif
If ItemHit=1
```

;User wishes to Quit.

```
CloseWindow 0
```

;Close window.

```
CloseScreen 0
```

;Close screen.

```
End
```

;Bye Bye.

```
Endif
Endif
Endif
Forever
```

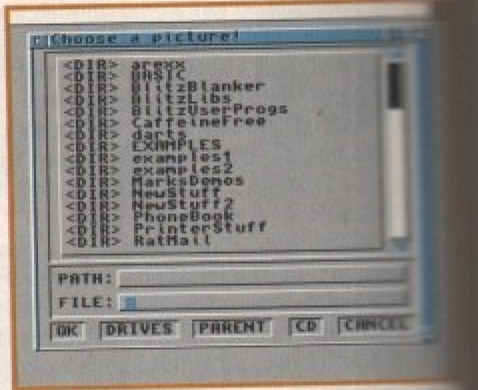
Try loading a few pictures into this pro-gram. See how it loads the picture onto th screen when it executes the LoadScree command but doesn't show the palette un the ShowPalette command.

Watching how the program executes is good way to finding out the right order write a series of commands to achieve pe fection.

Well that's it for this month. In ne month's issue we'll jump into the world gadgets as well as looking deeper into t screen, window, events and menus. S until next time, keep practising.

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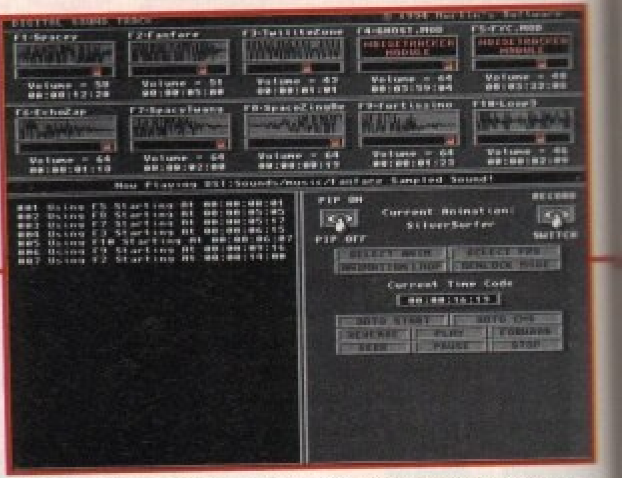

*If you need any help regarding the syntax of a certain command, simply place the cursor over it and press the Help key*




*Now we can attach a screen and add some menus to it. From here we can also load up a picture using a file requester*

# In time to

*Music can add meaning to a video. Gary Whitely pumps up the volume and puts soundtracks to his animations*



**DST provides one main screen, with ten sound 'slots', control buttons and a built-in window for script preparation or, with the right setup, Picture-in-Picture (PiP) viewing.**

Serious Amiga animators already have access to some fantastic tools, including world-class 3D programs, single-frame controllers, direct-to-disk video boards and some of the best real-time paint and animation software around.

But, when your video masterpiece is finished, what about its soundtrack? You *could* utilise the excellent Sunrize 16-bit sampling card, but that comes at a professional price which is a bit expensive if you just want to enhance your 24-bit remake of BladeRunner with a friend's dark jungle MOD files, or add some sound samples direct from your Amiga.

Digital Sound Track (DST), by Merlin's Software, is an American program which claims to answer the video animator's prayers, allowing IFF samples, SoundTracker, NoiseTracker and ProTracker MOD files to be synchronized to your timecode-locked SMPTE video.

## CONTROL

DST even allows a Picture-in-Picture (PiP) preview video display when GVP's IV-24 or an OpalVision video module is used.

DST works with a wide range of professional VTRs and single frame controllers – most of which aren't easily available outside the USA so I won't list them here – though strangely DST can't control the popular Nucleus Personal SFC.

Fortunately, support for DPS's Personal Animation Recorder has just been added, so I tested DST with a PAR card hooked up to the video input of an IV-24 – a system which alone would set you back over £5000. It seems you need to be pretty serious about your animation to be able to make full use of DST.

For all its claimed power, I was surprised to find that DST's manual is a skinny 12-page A5 affair which doesn't mention the PAR at all. Instead, the manual concentrates on the use of single frame controllers.

The actual PAR information is contained in a ReadMe file which also covers DST's Script Recording feature. I found the ReadMe more helpful than the manual, though I guess the PAR info will eventually find its way into the documentation proper.

Installing DST is a hit and miss affair, as it uses its own custom installer instead of the standard Commodore one. While installing the PAR version of the software, it also decided to install the OpalVision ARexx programs because it detected the OpalVision.library on my hard disk.

Giving the user full control over the installation would be a better option to avoid such problems. Eventually, after some manual installation, I got DST up and running, though I can't say it was as straightforward as it might have been.

With the hardware and software installed, getting it all to work seamlessly together proved something of a challenge. On start-up, DST displayed its single control screen with a quarter-sized window in the lower left corner, ready for inserting an IV-24 PiP to monitor your animations.

After relocating DST's ARexx scripts, configuring the IV-24 and running the IVPiP software, DST's PiP on/off switch eventually produced an NTSC-sized window showing the PAR's output.

Experimentation, reference to the IV-24 manual and some editing of the supplied ARexx scripts produced a better display, though PAL users shouldn't have to do all this extra work just to get a program working properly.

## SOUND

Finally, I could start adding sound to my animations. With the PAR running I was able to select an animation and control it from the DST screen, which wasn't always easy as DST's control buttons are small and sometimes awkward to use, while the animation time display is tiny and flickers during animation playback.

Switching the IV-24 display to video mode (essential when recording to tape) made the time counter virtually unreadable. If DST emulated the PAR's VCR-like control panel and large-digit display, this would be a great improvement.

Unlike the PAR, DST will only let you play an animation, go to a particular frame (selected by time), or jog forwards or backwards a frame at a time – a rather unstable procedure which sometimes locks up the program for a short time if the jog button is used too enthusiastically.

According to the manual, clicking on other parts of the screen should force the jogging to stop, but it didn't seem to work for me. The animation loop button also seems unreliable, sometimes causing only

## Sound tagging

Scripts are written using DST's script recording facility, which is easy to use but lacks the power to produce a totally satisfactory result.

By selecting "Begin Script Recording" a frame can be selected from an animation and a sound tagged to it. Each sound has to be added in the order that it will be played, or an error message appears.

When the script recording is finished you then can go into "record" or "test script" mode, and all the sounds will play back in time with the animation – at least that's the theory.

This is where a major problem arises. There appears to be no synchronisation lock between the PAR's frame counter and DST's timecode clock, which means that scripted sounds may well play back in completely the wrong plaace.

DST has a "Change Time Delay" option to allow manual tuning to the PAR's constant playback speed but, as this requires frequent resets, editing the soundtrack to any degree of accuracy quickly becomes an exercise in total frustration.

If you need to edit your script, to offset the unreliable synchronisation for example, the only way to do it is with an external text editor or wordprocessor. By editing scripts you can build up some fairly complex soundtracks – including setting the number of loops over which a sample will repeat, though the cryptic script format is only vaguely explained in the ReadMe file, making editing a tough job.

Setting the time at which a sound plays back seems rather arbitrary, since the numbers in the script bear no relation to those displayed on the DST screen.

I found the only practical way to insert a sound in a script was to begin a new script, indicate where I wanted a sound to play, save the script, then insert this new file into my main script using a text editor.

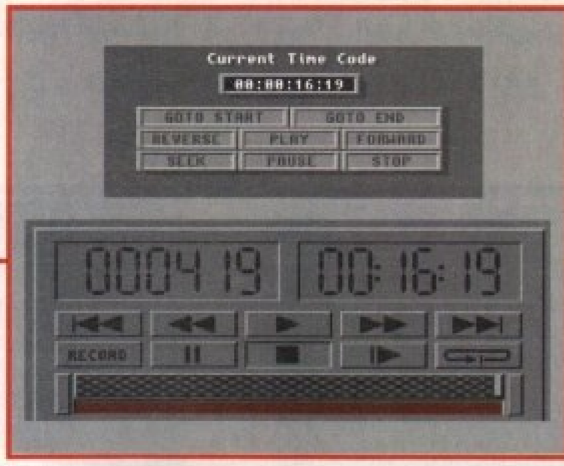
Once I got used to this method of working I began to enjoy my digital dubbing, but soon found the playback sync of my animations knocked out of kilter by DST's flaky synchronisation method.

Making a small change to a script would often throw everything else out. This, plus the fact that sounds would not always play back on the correct channel, soon had me reaching for the paracetemol.

Alas not an ideal situation, but as it stands there's no real alternative.



When GVP's IV-24 (or the upcoming OpalVision video module) is used, a PiP preview of the incoming animation can be displayed on DST's screen




*Compared to the PAR's own controls (lower illustration), DST's controls (upper illustration) are small and awkward and would be much better if they copied the PAR controls*

## What's missing

Since I couldn't get access to a suitable single Frame controller and VTR, I was unable to test how well DST works in this mode. It *would* be very useful though if DST could control newer VCRs which have RS-232 control – such as Sony's UVW Betacam series and Panasonic's pro S-VHS machines – which should be easy to implement.

If this control was available in conjunction with the PAR, then DST could become the control centre of a digital edit suite. However, it seems that the programmers already have their work cut out just making DST work properly with the PAR, never mind adding more features to the program.

Note that DST doesn't control Amiga animations, so if you thought it would be a useful way of blending your animation with samples and MODS I'm afraid you'll be disappointed. Try Scala MM300 or MainActor Pro instead.

# the music

the first few frames of an animation to play back. The FPS button should allow you to change the playback speed of an animation incrementally for slow-motion effects, but I could only get it to play at normal speed.

Even if it did work, it offers only 5, 10 and 15 frames-per-second speeds, instead of the much wider range available through the PAR software itself.

Fortunately, the PAR's keyboard controls *are* emulated and seem to work rather better than DST's on-screen buttons, although slow-motion control is still not included.

PAR control via DST is certainly not as reliable as it ought to be, and sometimes I had to restart DST to get the PAR control to work successfully.

DST provides four disks of PD samples and MODs, and some are of surprisingly good quality. Of course you can also use your own samples and MOD files, although most surprisingly DST doesn't support OctaMED MODs!

### LOADING

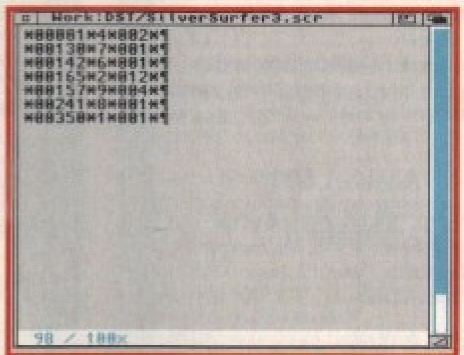
Loading sound files is fairly straightforward. Clicking on an empty sound box (each is also assigned to a function key) brings up a standard file requester, though sadly there's no preview option, so I had to resort to my directory utility (Directory Opus) to audition any likely samples.

Each sample or MOD file can be played back by either clicking on its box or by pressing its associated function key. Once loaded, the ten sound slots available are supposedly arranged in alternating stereo pairs.

These assignments aren't indicated on screen, even though they are mentioned several times in the manual.

Curiously, I found that loaded sounds did not always play on their assigned channels, particularly after playing a stereo MOD file first, producing some confusion about which sounds could be successfully played together.

*This is what you see if you want to edit a DST script in a text editor. Like me, you'll probably be flummoxed by its cryptic nature. It might as well be in Hex code.*



DST can play up to four samples simultaneously, or one stereo MOD file, providing a useful digital mix'n'match capability.

Once the sounds are loaded they can be added to an animation either by playing them back manually or by using DST's rather rudimentary scripting facility.

When using a single frame controller a VTR can be set to insert an audio track at a particular timecode reading, with DST playing back the appropriate sound on cue, but with the PAR you have to hook up both the PAR's video output and the Amiga's audio output to a VTR.

However, this method offers no control over the VTR, so everything must be recorded in a single pass, which means you either have to trigger the sounds manually or write yourself a control script.

In conjunction with the PAR, DST could be a very handy animation utility for adding spot effects and music, but until the synchronisation problems are sorted out it will only cause aggravation during critical work.

Since DST's PAR support is quite recent I hope we'll soon see a version that drives the PAR properly *and* provides better editing functions. Until then, save your pennies towards a more professional solution.

## Jargon buster

- **SMPTE**: As all Frank Zappa fans know, SMPTE stands for Society of Motion Picture and Television Engineers – the body which sets the guidelines for technical aspects of television in the USA.
  The European Broadcasting Union (EBU) is their European equivalent. SMPTE is commonly (if mistakenly) used to refer to the timecode signal employed to sync video and audio systems together.
- **MOD**: A compact file format for storing music and its associated sound samples which started life on the Amiga, but is now also available to PC users via their add-on sound cards.

## SYSTEM ESSENTIALS

**RED** = Essential **BLACK** = Recommended

| | | |
|---|---|---|
| 4 Mb RAM (red) | – Hard drive (black) | 6 Mb RAM (black) |
| 2.0+ Workbench (red) | | Text editor (black) |

## The bottom line

*Product: Digital Sound Track*
*Supplier: Merlin's Software*
*Publisher: Visual Inspirations, 809 West Hollywood, Tampa, Florida 33604, USA.*
*Phone: 0101 813 935 6410*
*Price: $99.95*

| | |
|---|---|
| **Ease of use** | 6 |
| **Implementation** | 4 |
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| **Overall** | 5 |

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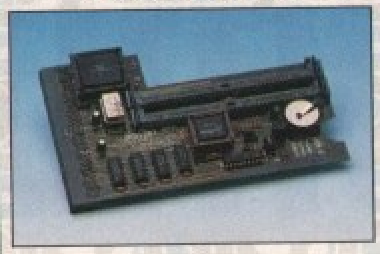
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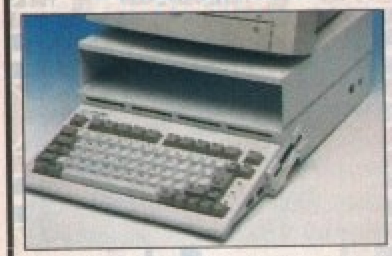


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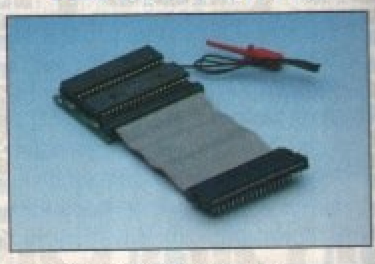
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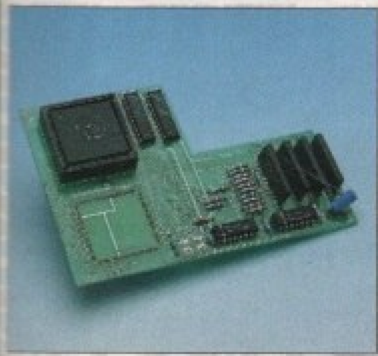
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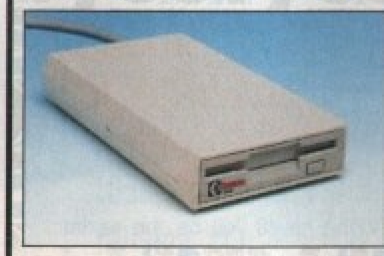
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# They do

From day one there has been an enormous amount of demand for an expansion port that would give the CD32 the characteristics of an A1200.

Paravision, realising this fact, were first to announce the development of such a unit. The SX-1, as it was later named, has been eagerly awaited ever since.

Contrary to popular belief, the CD32 is not an A1200 with a CD-ROM drive attached. Therefore, providing the CD32 with the sort of expansion capabilities found on the A1200 is not totally straight forward.

While it would appear that the CD32's designers have allowed for as much communication as possible through the consoles expansion port, all the outgoing and incoming signals need to be translated and manipulated before being of any use, to man or machine.

This has meant that the designers of the SX-1 have had to develop circuitry to mimic that which interfaces the guts of the Amiga with the outside world.

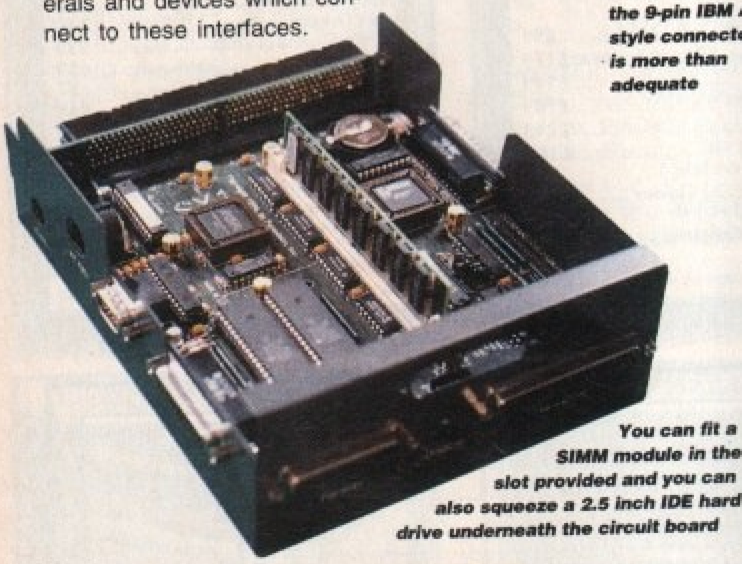
Paravision's SX-1 is a "Plug in and Go" expansion. Unless you are installing a hard drive there is no messing about with installation software.

Once connected you can hook up to a suitable monitor, an A1200-compatible floppy drive, a printer, a modem or even another computer. In fact you can fit almost anything that can be attached to an A1200.

The parallel, floppy and RGB connectors are standard Amiga ports and will work fine with the vast majority of existing Amiga peripherals and devices which connect to these interfaces.

While the serial port is not the standard Amiga DB25 connector, the 9-pin IBM AT style connector is more than adequate



You can fit a SIMM module in the slot provided and you can also squeeze a 2.5 inch IDE hard drive underneath the circuit board

You may also fit an external IDE drive, but it must have its own power supply While the serial port is not the standard Amiga DB25 connector, the 9-pin IBM AT style connector is more than adequate

Your first stumbling block will be the serial port. Rather than use the more expensive and hard-to-come-by 25-pin D connectors, Paravision have opted for the more common IBM AT style 9-pin D connector.

Before you get too concerned, the Amiga's RS232 serial port only uses nine of the 25 pins and 9 to 25-pin adapters are quite easy to come by. Around the outside of the unit you will also find a disable switch, a hard drive connector, an AT keyboard socket and an audio input.

## DISABLING

For the sake of compatibility, with some CD32 software titles a disable switch has been added. This disables the hard drive, floppy drive, serial port and parallel port, removing the need to disconnect the SX-1 should you come across any incompatibilities.

It is possible to connect an external IDE hard drive, with its own power source, to the hard drive connector at the rear of the machine. The only problem I found with this was that the Appendix concerning the external hard drive, which was supposed to detail the pin configurations, was missing.

This should be resolved but if it is important to you then check with your supplier before purchasing. The CD32's Aux port will acce an A4000 keyboard, or even an A2000 one with the correct adapter, but there is one sligh snag – they are expensive.

Amiga keyboards, unless picked up second hand, can cost as much as £90. The inclusion of an IBM AT-101 keyboard adapter should prove a real godsend, because you can pick up a suitable keyboard for as little as £25.

IBM AT-101 keyboards are not at all compatible with the Amiga's keyboard, but the SX-1 has an inbuilt translator that makes the PC keyboard act like an Amiga one.

Not all PC keyboards are AT-101 compati ble, such as the XT keyboards, so you wil need to exercise a little caution when buying one.

You may also find that your AT-101 keyboard lacks a right ALT key. Should this be the case, there is a jumper setting on the SX-1's motherboard that allows the right CTRL button to be used instead.

As well as being able to mix both CD an Amiga audio, you will find that the SX-1 w allow you to mix a third audio stream, via th 6-pin Mini-Din socket.

If you are a closet Karoke nut then this fea ture may be of interest you. For those tha want a bit more umph, you can remove th unit's cover and add a 2.5 inch IDE hard driv or some extra memory.

The IDE drive can be secured to the unde side of the circuit board and the cable attached to the standard 44-pin (2mm) co nector. The single 72-pin SIMM socket w accept either a 1, 2, 4 or 8 megabyte SIM module (rated at 80ns or faster).

Jumper settings allow you to configure t memory size accordingly but you will expe ence certain limitations if you have an FM card fitted. Due to the nature of the FMV co figuration you will only be able to use 1, 2 o

## In comparison

There is little to compare the SX-1 with. Several three-line serial links have been produced for the CD32 and these have enabled Amiga owners (and no doubt a few PC users) to transfer files from the CD32 onto their Amiga.

Such add-ons, while functional, are not exactly breathtakingly fast and offer nothing but a simple serial connection. Some people seem to think that the SX-1 will turn their CD32 into an A1200.

This is not the case. It gives your CD32 many of the A1200's characteristics but fails to achieve the impossible, which is turn it into an A1200. Think of it as an additional model in the Amiga computer range and you should not be disappointed.

Any A1200-compatible software should work fine on the CD32 fitted with the SX-1. I certainly could not find any problems on this front, despite constant attempts to catch it out. Even programs written in Amos worked fine. Amos is packed with hardware-hitting routines and short cuts – the fact that it worked on the CD32 would suggest that many other OS unfriendly programs should run.

The AT-101 keyboard adapter was, I felt sure, bound to throw a few wobblies but it happily handled all that I threw at it. The inclusion of this option was an incredibly shrewd move and Paravision should be applauded for it.

# rom rom

*CD32 owners can now turn their consoles into a CD-ROM-equipped Amiga. Andrew Deeley puts the first major CD32 add-on through a thorough test.*

megabyte SIMM's. Incidentally, if you do own an FMV module you will find that the SX-1 provides full FMV passthrough, allowing the FMV/Mpeg board to be used with the SX-1.

Last but not least is the onboard real-time clock. This is an AmigaDos-compatible clock which is powered by a long life CR2032 replaceable lithium battery. Something that many A1200 do not possess.

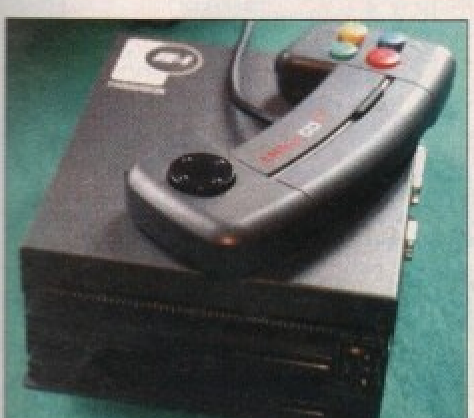
So does all this turn your CD32 into a usable Amiga computer? Well effectively it does. To prove this I spent hours down loading files from CD-ROM discs onto floppies, running floppy-based software, printing off doc files, playing the odd game and parneting it up to an A4000 in order to chuck files all over the place.

## SUPPORT

I even hooked up a modem and used the CD32 to log onto a couple of boards. What you cannot do is add a faster processor, an FPU chip or a SCSI controller. Whether it is possible to provide support for these remains to be seen, but no announcements have been made as yet.

If you are to experience any hardware compatibility problems with the SX-1 then you will probably find the cause to be power related. The CD32's power supply is a bit whimpy in the amperage department.

It works perfectly well with the CD32 but may not like too many peripherals drawing from it. Much depends on how greedy your hardware is, but you will find that you should be able to connect both a 2.5 inch hard drive



Paravision's SX-1

> The addition of an FMV card, a digitizer or sampler, which draw their power from the CD32, could be asking too much, causing the machine to crash.

and an 3.5 inch external floppy drive (despite the instructions advising that you will only be able to use one or the other).

The addition of an FMV card, a digitizer or sampler, which draw their power from the CD32, could be asking too much, causing the machine to crash.

I actually connected an external floppy, along with the Vidi digitizer and the separate Vidi RGB splitter. Older Vidi models are notoriously greedy when it comes to power consumption (newer ones are much better) and this combination proved too much for the CD32's PSU

Instructions are rather brief and do not contain any diagrams. While this may not be necessary for most of the features, diagrams do tend to break up the text making it more digestible.

The placing of the RGB socket was also a little odd. I found that the adapter on my CBM 1960's monitor lead sat tightly on top of the CD32's power plug. It did not prevent it from working but it was still slightly annoying.

Actually the whole design was a little disappointing. A much neater solution would have been to have a unit that sat underneath the CD32, with one long row of connectors along the back.



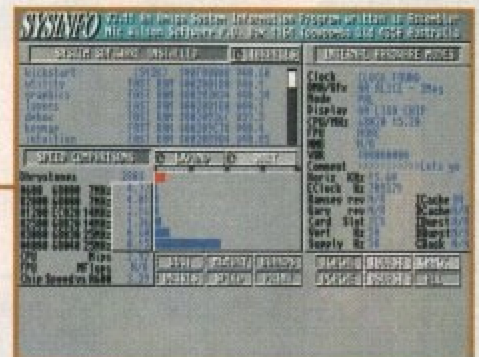
If you own an A4000 keyboard you can plug it straight into the CD32's AUX port. Failing this, the SX-1 will take certain PC keyboards



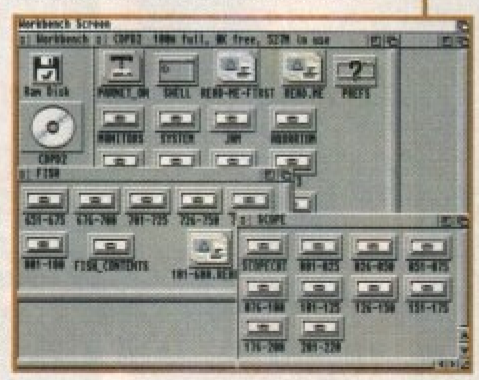

Running floppy-based games is no problem. This one was written in AMOS and proved that the CD32/SX-1 could handle hardware-hitting software



All manner of clipart and picture files are there for the taking




SysInfo checks out the performance of the CD32 and SX-1 combination. The addition of a Fast RAM SIMM module increases performance considerably




Invest in a few CD-ROM discs and you will have access to almost every possible piece of software that has been released into the Public Domain.

## The bottom line

Product: SX-1
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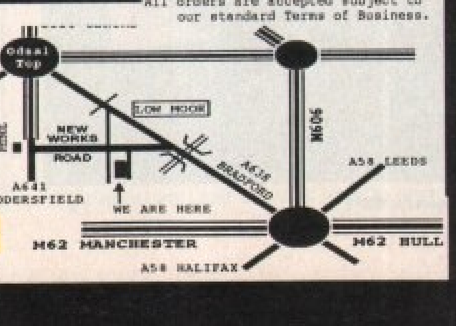
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# Playing with fire

*Paul Austin sets his Amiga ablaze with the CD that every animator must have in their collection*

One of the biggest dilemmas for any animator is how to make their creations believable. In many cases the obvious solution is to incorporate a sequence of stills from the real-world as part of the overall animation.

As a result, things like TV screens and windows can come to life with your favourite soap and scenery. Seemingly the perfect solution. However, what if you need a little more than a simple sequence mapped onto a flat plain.

For example how do you add explosions to blazing ships or flickering flames to a candle – without spending thousands on expensive pyrotechnics and studio facilities.

The answer. The pyromania CD-ROM from VCE inc. Thanks to this California outfit, the nightmare of making a believable big bang is finally over.

Although many of the more advanced Amiga animation systems attempt to emulate explosions and other pyrotechnics, they've never really been on a par with the real thing.

As a result, this new CD-ROM will be a godsend for anyone looking for the kind of FX usually exclusive to big Hollywood productions.

Over the last 16 years VCE, or Visual Concept Engineering, has been a leading light – pun intended – in the production of visual effects for films such as Return of the Jedi, Robocop, Beetlejuice, Addams Family and Cliffhanger.

Fortunately they've now decided to lavish their wealth of experience on a new CD-ROM which boasts 1182 individual PICT files, all scanned from 35mm film stock at a resolution of 640 x 480 at 72 DPI.

Not surprisingly, the aforementioned files are split into a variety of events including eight explosions, five fire wipes, five flame sequences and a single film burn sequence.

Consequently, pretty much every pyrotechnic eventuality can be catered for by using individual sequences or compositing a series of events together. Now as the videographers will be well aware, 640 x 480 is a little short on full video resolution. However, thanks to the excellent quality of the images, scaling up to full video size doesn't really present a problem.

However, in the vast majority of cases the actual effect will only occupy a relatively small area on the screen. As a result, for many of the applications the files may in fact need scaling down – in order to accommodate system requirements.

As you've probably guessed via the reference to the PICT file format, the actual CD is primarily aimed at the PC and Macintosh market. Thanks to the use of a standard ISO9660 CD format though, the files are equally at home on the Amiga as they are on the PC or Mac.

I must admit there is one minor problem, this being the lack of an animated preview of the various sequences.

## COMPILING

On both the Mac and PC, small anim previews are provided for each event. However, if you're willing to invest a little time compiling your own it isn't exactly a massive problem.

As you can see from the composite space ship explosion, all the Pyromania images have been shot on a black background to aid composition. It must be stressed that the images have not been pre-processed.

In other words, the black areas of the screen are not restricted to colour zero. As a result it's left up to the user to process the images to suit their particular needs.

Basically, some form of image processing is essential, with either ADPro or ImageFX being the obvious choice for both colour correct and composition of the effects into your animations.

If you're serious about your animation the CD is an absolute must. To my knowledge there's no other product available that can match the explosive power of this impressive product.

Be warned though, there's still a fair amount of work to do in your favourite image processor if you want the very best from the images on offer. A dream come true for serious animators.

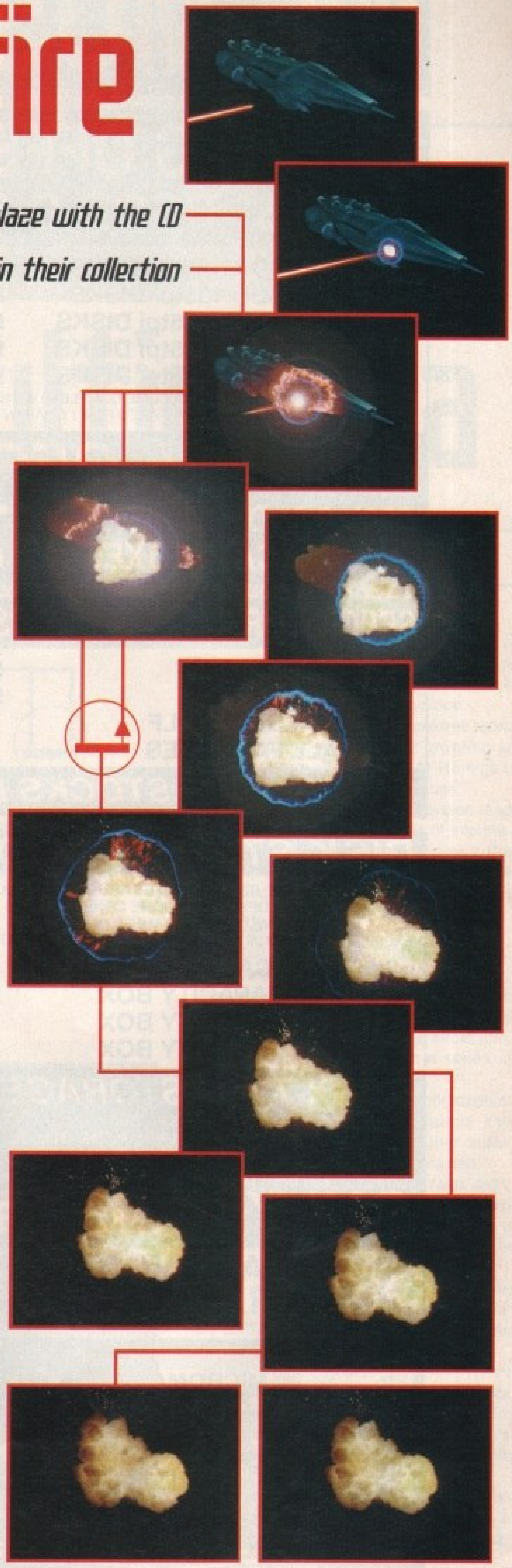
## Fire wipes

Although the vast majority of the CD is dedicated to explosions and other spectacular pyrotechnics, there's also a series of dedicated wipes that have been pre-processed using an alpha channel, thereby enabling the user to apply flaming transitions between static images.

The end result is a wall or circle of flame which glides across the screen burning away the current image, leaving the replacement in its wake. Without seeing the effect in action it's difficult to appreciate how impressive it actually is. But rest assured, even the most dramatic Scala transition looks weak in comparison.

## The bottom line

Product: Pyromania
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# Grass, sheep and multimedia




*Photographs and details on attractions and other features are on offer with the press of a button*

***Sick of those holiday blues? Let the Amiga take you by the hand. Adam Phillips reports.***

You're tired, hungry, weather beaten and ever so slightly lost. The tourist information office sits in a glow of warm sunlight as you make your way towards it. Entering, you are confronted by row upon row of pamphlets, maps and advertising booklets.

A friendly smile beams at you from behind the counter and asks if it can help you. Several minutes later, you leave the premises with half a dozen maps, five hotel brochures and a clump of local attractions' pamphlets after grabbing blindly at the shelves. For some strange reason, you don't feel any the wiser.

Imagine this in a foreign country and the already hassled individual turns in to a panic stricken holiday maker with two kids and wife waiting in the car, all on the mutinous verge of Sealinking it back home sharpish.

In North Wales, the tourist board has decided to take an important step closer to customer satisfaction by introducing the country's first multimedia, computer-based information bureau to help visitors with accommodation, attractions and many other slices of the locale's culture.

## ATTRACTIONS

With the simple press of a button to highlight the area you wish to explore, the visitor and locals alike are able to obtain an overview of a particular region's attractions at the time. Photographs and the soon-to-be installed full-motion video aid the holidaymaker in choosing what they will do with their well-earned vacation.

The idea was thought up by Peter Simunovic, a Croatian who moved to Britain eight years ago. While working for the Clwyd County Council, Peter was already heavily involved with Commodore machines having owned a Vic-20, C64 and 500.

He saw the opportunity to use the Amiga as the perfect platform for the continually updated delivery of valuable information for tourists. "I would like to see Commodore growing out of the game situation and getting more into corporate affairs because the machine has so much potential. Businesses don't know about the Amiga – they have been surprised by what the machine can do."



*From left to right – Bill Owen, Peter Simunovic and Commodore's marketing manager, Jonathan Anderson*

After putting together a proposal, he managed to convince the County Council to give a development grant. The demonstrations began and, after impressing the Welsh Office, Peter says that he "got a decision almost instantly."

The impressed investors awarded a full grant of £15,000 for the project to be developed and installed in the Denbigh library.

In stepped Ramiga International, headed by managing director Bill Owen, to help bring the brainchild to life. By using an Amiga 4000/040 combined with the Personal Paint Animator that captures individual frames in real time, the Piccolo 24-bit display board, an Mpeg board for handling full motion video, SCSI2 board and a Philips compact disc cutter for creating custom CDs, the basic tools for creating the interactive tourist guide were in place.

While some of the above features were not implemented at the official unveiling at Denbigh library, the results of Ramiga's labour are attractive and easy to use.

Implementing a Scala-based system and a hard drive with over 62 megs of information, the user simply has to press the colour-coded buttons to the side of the screen to choose their desired topic.

## TOPICS

The full rundown includes attractions, eating out, events, general info and highly useful emergency numbers. By pressing on "places to stay", you'll be prompted to select what board rating you can afford and, once done, be presented with a series of hotels in your price bracket.

Choose one and, along with information on location, fees and other details, the actual rooms, reception and other areas may be viewed with accompanying text.

At present, only two of North Wales' eight counties have been entered – Clwyd and Gwynedd – but the intention is to have a fully comprehensive breakdown of the entire country.

While the system is 4000-based at the moment, the aim is to produce seven terminals connected to each other via modems for ease of updates.

Instead of the 4000, CD32's at each point using the CD32x expansion unit from Index Information – the company responsible for the recent London Transport Museum's facelift – and a hard drive will run the whole system.

Coupled with FMV, the Wales Tourist Board can hopefully look forward to a rewarding pilot run.



*Touch the colour-coded buttons to operate the system*

## Looking forward

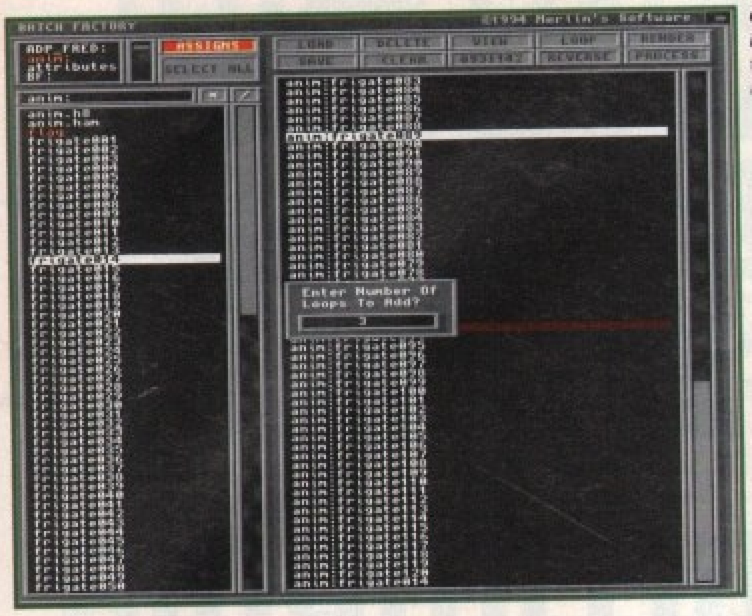
There are big plans for the future. Ramiga and Peter Simunovic are planning a visit to Orlando in America to talk to a chain of hotels about the possible inclusion of the system in their complexes.

The technology would remain the same: "The concept is the same from tourism to large hospitals or creating an information system for business. Everything is the same, only the data changes," commented Simunovic.

Ultimately, Peter has high hopes for Commodore's machines: "We want to install a CD32 in every hotel room and can deliver an entertainment box in one.

"On holiday, your home is your bedroom and you have a single machine that plays music, video, games and information. There is still a long way to go though."

And that's another article too...




*Creating loops is a snip with the dedicated loop button*




*The world's slowest file requester, maybe, but there are plenty of ADPro scripts*

# Backstage

*Stevie Kennedy automates just about everything in sight with the latest helping hand, Batch Factory*

The trouble with ARexx and the majority of programs which support it is that hardly anyone can be bothered to learn enough ARexx to write their own scripts and macros.

Sorry, but there it is. ARexx is about as interesting as a bus timetable and the programmers, thinking they had provided an easy enough language for the average user, were forced to go away and make it even easier.

Since ADPro was blessed with the superb ProControl and ProPage got its Genies, ARexx macros have gradually become more common, but there has never been an all-round macro control centre. Batch Factory hopes to be the answer by supporting as many of the best applications as possible.

In a package containing 304 scripts covering 11 applications, the macro-starved user will find an ARexx elastoplast for many common or garden ailments.

## SCRIPTS

ADPro users can choose from 68 scripts, most of which can be used on single or multiple files, ProPage users can add to their already long list of Genies, and even good old AmigaDOS gets ten scripts of its own.

When loaded, Batch Factory has the appearance of a directory manager. Two large windows are used to display the current directory and the files selected for processing, and only a single row of buttons breaks up what is an otherwise uninspiring screen.

Minimalism is carried over to the menus, which offer only a few options and can leave you wondering where the meat and veg is located.

Choose to select a script, however, and the poor impression quickly changes. A file requester, slower than the average snail but still usable, offers access to an Aladdin's cave of macros of all shapes and sizes.

The most obvious use for a program such as this is for work with ADPro, so that's where I started.

The 68 scripts dedicated to ADPro cover the usual sort of tasks, such as rendering animations from a sequence of images, plus a variety of common image processing tasks.

Unlike ProControl, ADPro's dedicated batch front-end, Batch Factory cannot create a script as you go along by choosing loaders, operators, and savers, but the program has a multiple script facility so that images can be put through several processes one after the other, which is almost as good.

Covering all the most popular operators, such as twirl, rotate, scale, and so on, the macro list is comprehensive enough to meet most requirements, though it still can't touch ProControl or Mutiframe as an ADPro add-on.

The bad news is that if you take a look at the support panel you'll notice that some applications are decidedly better served than others.

Batch Factory's macros are heavily biased towards the image processors and Opal Paint, and while these packages are treated to dozens of useful scripts, the others can look a little sad, particularly Final Writer with its paltry four and Cygnus Ed (CED) with only two.

## MACROS

Of course, macros can be written and stored in Batch Factory's directory for use with any ARexx-compatible package, but in this case the only added attraction of Batch Factory is that it can process several scripts in sequence.

The asking price of $59.95 is therefore a little less justifiable if you don't use one of the packages on which Batch Factory lavishes most of its attention.

Again, if the thought of writing your own macros prompts you to wash your socks or fix that wobbly table leg you've been meaning to get around to for the last year or so, take a very close look at just how many macros you get for your

## Support

Below is a list of the packages supported by Batch Factory and the number of scripts supplied for each. If PageStream 3.0 is notable by its absence, don't worry.

Batch Factory will support it through an update as soon as the DTP heavyweight appears. As PS3 has already enjoyed the gestation period of an elephant, we can only hope it pops out of SoftLogik's incubators soon.

| | |
|---|---|
| ADPro | 68 scripts |
| AmigaDOS | 10 scripts |
| Image FX | 82 scripts |
| Cygnus Ed | 2 scripts |
| Final Writer | 4 scripts |
| Image Master RT | 75 scripts |
| Morph Plus | 6 scripts |
| Opal Paint | 36 scripts |
| P.A.R | 15 scripts |
| ProPage | 6 scripts |

## The alternatives

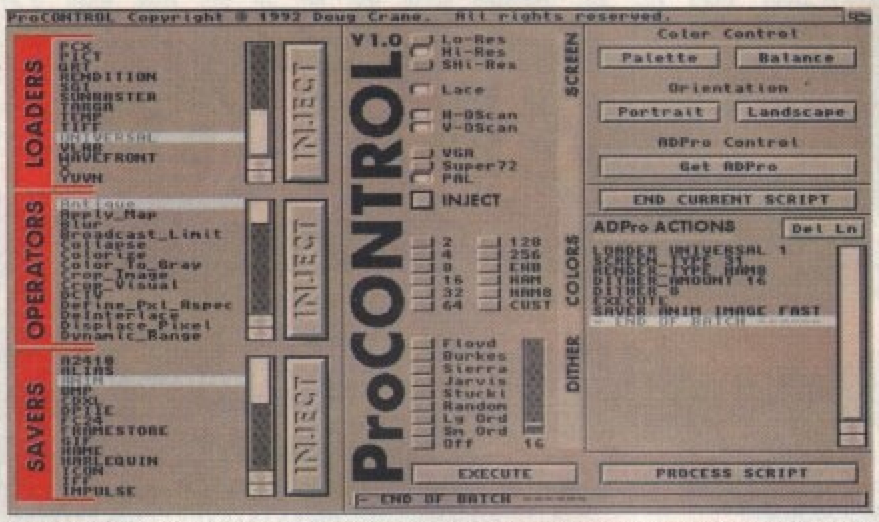
There are few ARexx front-end utilities on the market, a fact which lends Batch Factory much of its appeal, but those that do exist are much better, if more specialised.

ProControl, for example, is dedicated to ADPro batch processing and does the job beautifully. Its simple and elegant interface is much more attractive than Batch Factory's, and ProControl has the invaluable advantage of building scripts from scratch using point and click input from the user.

In a straight fight for the ADPro market, Batch Factory would go down in the first, stagger on through the second, and take a ten count in the third at the latest.

Multiframe is a slightly different proposition in that it can be used to preview the effects of a script, a huge aid when rendering something like a 24-bit ripple pattern.

As a batch processor it's fine, but many users will want something simpler for straightforward jobs. Unfortunately for Batch Factory, ProControl will scoop up most of these people in a trice.




**ProControl: more specialised than Batch Factory, but a far better companion to ADPro**

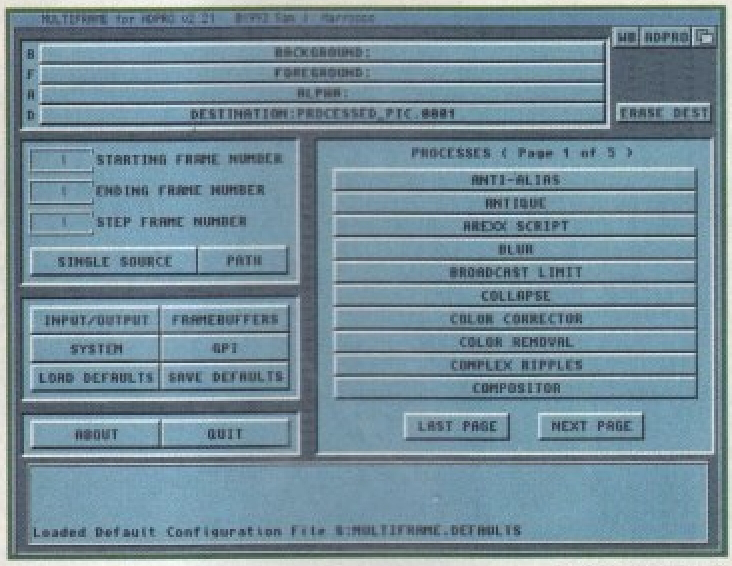
# hero

mullah. In use, Batch Factory is very easy to use, and the manual is only really needed when the program is first installed.

So long as ARexx is running (the RexxMast program is usually run from Workbench's startup-sequence), Batch Factory will launch the required program, be it Image FX or ProPage, and carry out its assigned task without fuss.

### MASTERING

Some tasks will require user input in the form of a new filename or a specified saved files directory, but all the tricky stuff drifts by while you make a cup of tea and give your latest issue of *Amiga Computing* the thorough reading it deserves. As with other




***Multiframe: great program, but a bit OTT just for batch processing***

ARexx front-ends such as Fred and Mutiframe, you can master this program armed only with a working knowledge of the mouse.

Besides the scripting functions, Batch Factory has a couple of very useful extra buttons, namely the reverse and loop buttons. Once the program knows the first and last files in the list to be reversed, the reverse feature inverts the order of the images and adds them to the list for processing. This can be very handy when creating large animations and saves rendering the same sequence twice just to get, say, a morph to reverse its course.

Loop is a simple button which again prompts for a first and last file before taking the selected files and adding them (in their original order) to the end of the file list.

DPaint users will probably be thinking "so what?", but though looping and ping-ponging are easy with 32-colour DPaint anims, it's not so easy with 24-bit images and not as widely supported in higher level packages.

### APPEAL

These final two features give Batch Factory more appeal, but overall the package will only sell to those who use the packages it supports most or to those who aready program in ARexx.

Without the facility to build new scripts from within the program, Batch Factory falls down in the novice stakes and robs itself of a much larger audience.

## What's a macro?

ARexx is the Amiga's script-based language for communication between different programs and has been supplied as standard since Workbench 2.0 was released.

An ARexx script is written as a text file in an editor such as ED or a word processor, then saved to disk for use by any program which supports the standard (most do nowadays).

When a script is executed it runs in the background and can be used to do just about anything, so long as the application it is aiding has enough of its own ARexx functions built in. ADPro and ProPage are good examples of programs which can be completely controlled from ARexx.

The script sends and receives commands from its parent program and can loop over and over again to carry out mundane tasks, such as renaming all the files in a particular directory or creating an animation from hundreds of single images.

Batch Factory has over 300 scripts (or macros) and can run any that the user creates, thus taking the drudgery out of many tasks.

## SYSTEM ESSENTIALS

**RED** = Essential **BLACK** = Recommended

| Workbench 2 | Hard drive | 5 Mb RAM |
|---|---|---|

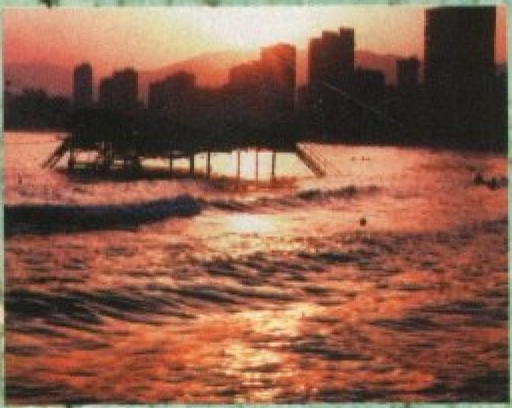
## The bottom line

*Product: Batch Factory*
*Price: $59.95*
*Supplier: Visual Inspirations*
*Tel: (0101) 813 6410 (voice or fax)*

| | |
|---|---|
| **Ease of use** | 8 |
| **Implementation** | 6 |
| **Value for money** | 6 |
| **Overall** | 7 |

# Alternative 3D Textures





Volume 3 of the Alternative 3D Texture library is now shipping. Our new approach to textures now means that using JPEG compression we can supply over 100 stunning images in this 12 disk set. Each image is supplied at full 24 bit broadcast resolution (768x576).

This volume contains images that are ideal for background use in presentations - many of them also make stunning 3D texture maps. The images are arranged in 12 categories - Architectural, Landscapes, Maps, Metals, Miscellaneous, Organic, People, Raytrace, Skies, Stone, Water and Wood. Some of the images are supplied with alpha channel masks for compositing over other backgrounds (see the Evolution of Man image in this advert).



Also now available are Volumes 1 & 2. Each set contains 12 images supplied in 4 sizes/resolutions.

Volume 1 includes - Grass, Rich Marble, Silver Birch, Sky, Bark, Walnut. Also supplied with Real 3D Classic Support Disks 1 (tutorials & example animation files, eg. water effect).

Volume 2 includes - Cork, Sand, Sea Stone, Classic Marble, Shell. Also supplied with either Real 3D Classic Support Disks 2 or Imagine 2.0 Support Disks (you choose).






Prices:

| | |
|---|---|
| Alternative 3D Textures Vol 3 | £51.50 |
| Alternative 3D Textures Vol 2 | £41.50 |
| (please specify Imagine or Real 3D Support Disks) | |
| Alternative 3D Textures Vol 1 | £41.50 |

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Tel: 0533 - 440041 Fax: 0533 - 440650 MasterCard/VISA Cheque P.O.

# Through the square window




## Part 2

*Paul Overaa tackles the next stage of his example utility by adding some window opening code...*

This month we are opening windows the modern way (Release 2 onwards) and in order for things to make sense, some system routine changes need to be discussed.

In order to create the enhancements which came with Release 2, many established system procedures, like window opening, required extra data items to be specified.

The new Commodore approach to this is based on the use of arrays that contain pairs of items consisting of an identifying label and a corresponding 'real' parameter value.

Since these lists provide a way of tagging additional parameters onto existing O/S structures, they have been called tag lists and are based on system structures known as TagItems.

If you look in the Utility/tagitem.i header you'll find that these entities are actually defined as above:

```
STRUCTURE    TagItem, 0
ULONG        ti_Tag
ULONG        ti_Data
LABEL        ti_SIZEOF
```

The STRUCTURE, ULONG and LABEL items are some general system macros designed to allow the assembly language included to be written using C style structures.

You don't need to know how they work, just remember that each tag item consists of a pair of long word values – the first long word provides a 32-bit identity, the second a corresponding 32-bit parameter value.

Tag identity values are, in the main, context specific and in the intuition.i header file for example you'll find definitions of a great many Intuition-related tag identities.

WA_Left, WA_Top, WA_Width and WA_Height for instance are used to specify window position and size information.

A number of general tag item values have also been defined and can be found, along with the TagItem structure itself, in the utility/tagitem.i system include file. Here are some example entries:

- TAG_IGNORE — Indicates that the associated data item should be ignored.
- TAG_SKIP — Skip this and the next ti_Data TagItems.
- TAG_END — Signals the end of an array (the ti_Data field is unused).

You'll see how tag list data is defined and used as we sketch out this month's code, but before that I need to explain exactly what we shall be doing.

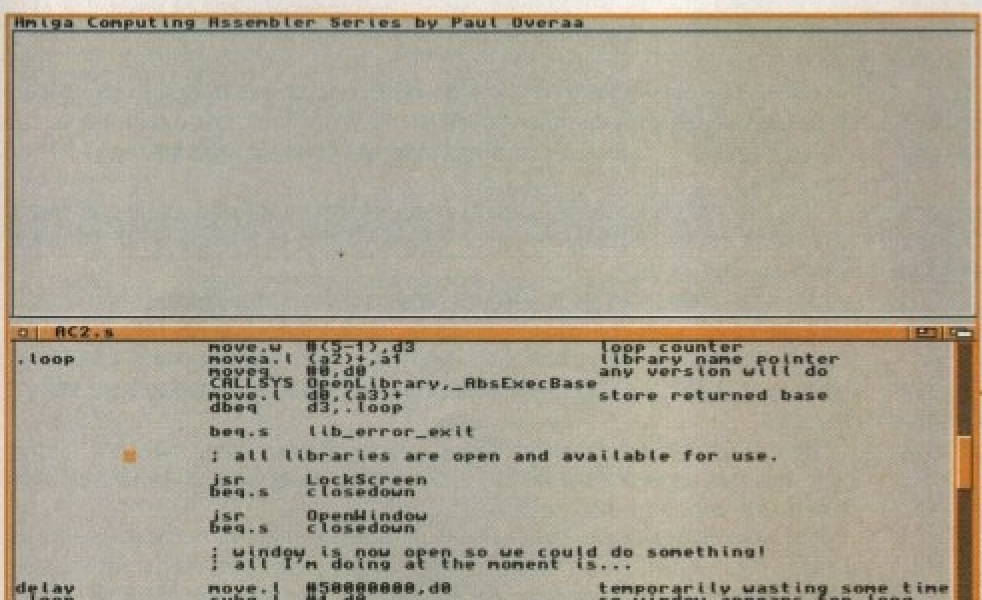
Last month I dealt with the code which, among other things, opened the Intuition library. Now you might think that once this library has been opened we would simply have to use a suitable library function to open a window in the Workbench screen. Sorry, no such luck!

To prevent a user or application from closing the Workbench before we can open a window, a 'locking routine' must be used to force the Workbench screen to remain open.

An 'unlocking' function is also available and the idea is that we sandwich the window opening code somewhere between the locking and unlocking code.

The locking/unlocking routines, called LockPubScreen() and UnlockPubScreen(), can be used on any public screens and are handled just like any other library functions.

The required parameters are set up, the ➤




***OK, so an Intuition window like this may not look like much, but in producing it we've covered a lot of important groundwork!***

library base is placed in register a6, and the appropriate indirect sub-routine call is made. On return, the results (if any) are checked to see that they are valid.

One way of locking the Workbench screen is to set up a static name definition using a dc.b directive, along with a variable to store the returned Workbench pointer. For example:

```
workbench_name          dc.b 'Workbench',NULL
workbench_p             ds.l 1
```

and then use this type of bare bones library call arrangement:

```
LockScreen lea          workbench_name,a0
pointer to screen name
          CALLSYS
LockPubScreen,_IntuitionBase
          move.l        d0,workbench_p
save returned pointer
          rts
```

The basic code for unlocking the screen is even simpler:

```
UnlkScreen movea.w      #NULL,a0    screen name not
needed
          movea.l       workbench_p,a1
screen to unlock
          CALLSYS       UnlockPubScreen,
IntuitionBase
          rts
```

We need to tell Intuition which screen we want our window to open in and this, along with various other parameters, is something that we specify in a tag list.

For clarity, the standard Commodore tag identity names should also be used, but to avoid requiring the use of the official include files I'll be setting up these items within the source code itself.

The following EQUates do just that and produce results identical to those found in the official intuition/intuition.i and utility/tagitem.i include files:

```
TAG_DONE EQU        0
WA_BASE  EQU        $80000063
WA_Left  EQU        WA_BASE+$01
WA_Top   EQU        WA_BASE+$02
WA_Width EQU        WA_BASE+$03
WA_HeightEQU        WA_BASE+$04
WA_Title            EQU        WA_BASE+$0B
WA_DragBar          EQU        WA_BASE+$1F
WA_PubScreen        EQU        WA_BASE+$16
```

WA_Left, WA_Top, WA_Width, WA_Height and WA_Title are used to provide details of the size and title of the window (provided in the corresponding data fields).

WA_DragBar, as the name suggests, asks Intuition to place a drag bar on the window if the data item field is set to TRUE and WA_PubScreen is used to supply the address of the screen being used.

Most tag identities and values can be set up as static definitions consisting of identity+value pairs, so for the most part we can decide what values are needed before assembling the program!

The data part of the WA_PubScreen however, a pointer to the public screen, cannot be set up in this way, since the value comes back at run time from the LockPubScreen() function. Because of this you'll see that I've given the WA_PubScreen data field a separate label.

The WorkBench address has to be stored anyway (it's needed in order to release the public screen lock) so I've chosen to store it directly in the tag list data.

Once the screen is locked a window can be opened and in this month's code I am creating a 640x200 pixel window with a drag bar which opens at the top left screen location of (0,0).

Here are the tag list storage definitions being used:

```
tags      dc.l       WA_PubScreen
workbench_p          ds.l      1
          dc.l       WA_Left,0
          dc.l       WA_Top,0
          dc.l       WA_Width,640
          dc.l       WA_Height,200
          dc.l       WA_DragBar,TRUE
          dc.l       WA_Title,window_name
          dc.l       TAG_DONE,NULL
```

Prior to the OpenWidowTagList() call, register a1 will be loaded with the start of the tag list using code which in its simplest form looks something like this:

```
OpenWindow              movea.w    #NULL,a0
        lea                        tags,a1
start of  tag list
        CALLSYS
OpenWindowTagList,_IntuitionBase
```

## Error handling and program closedown

At the moment we've got just four additional operations to perform. Screen locking and unlocking, and window opening and closing. There will be many more in the final program and, as with library opening, many of these operations may conceivably fail.

For this example program I'm going to adopt an approach which is a simplified version of something which, in my C programs, I call 'dynamic resource allocation'.

The idea is to code all allocation and opening operations as separate subroutines that try to carry out their intended job and then either fail and return an error code, or succeed and push the address of a corresponding de-allocation routine onto a function pointer stack.

Under normal (non-error) termination conditions, program closedown occurs by reading any existing pointers from the function pointer stack and executing the corresponding de-allocation routines.

If during any of the allocation attempts an error occurs, the same stack emptying routine gets called but only those pointers that have been placed onto the stack prior to the occurrence of the error will be retrieved and executed.

Hence, one de-allocation loop handles both error and non-error condition closedown perfectly safely.

This may seem like an unnecessary complicated way of doing things but it's not been used to make things difficult for you. Far from it, because this technique makes systematic program closedown a piece of cake – just look how easy the de-allocation loop is to code:

```
closedown       move.l      (a5)+,d0    retrieve function pointer
      beq.s     lib_normal_exit
      move.l    d0,a0
      jsr       (a0)        and execute routine if it exists
      bra.s     closedown
```

We pull the function pointer off the stack and providing that it is non-zero, execute the function. Just five instructions are needed, so the 680x0 chip is pretty good for these type of operations – do note though that a data register (I've arbitrarily chosen d0) has to be used within the loop because you cannot use the 680x0's move instruction to load an address register directly.

You'll notice in the source code on disk that I've set up a null address right at the top of the function pointer stack – this is specifically to allow this zero address test to be used to indicate when all items have been removed and used.

There is another important benefit with this stack-based approach as well. The de-allocation/closedown routines automatically get executed in the reverse order to that used in the initial allocation/opening stages of the program.

This provides a nice safe way of de-allocating things and avoids having to use loads of 'spaghetti code' jumps and branches to provide error pathways when operations fail.

Listing 1 shows the code arrangements for the locking/unlocking routines and listing 2 shows the window routines. (Note: these lisings referred to are on the Cover Disk along with the extended version of the code.) Notice incidentally that I'm using an error label that starts with a period in both sets of routines.

This is Devpac's way of signifying a local label (a label that gets tagged onto the last used normal label to allow effective re-use of commonly used labels like loop, error and so on).

I've also changed a couple of loop names from last month's code to provide other local label illustrations. Note however, that with some other assemblers you may need to remove the periods and add a terminal $ sign to the labels to get the same effect (if in doubt, check your assembler manual).

# public sector



***As Summer has drifted to its conclusion and Autumn's deep hues are now upon us, James Johnson goes scrumping for quality PD***

Check out the latest and greatest from the world of PD. Whether you need the latest utility or want to indulge in the delights of demos, from Bjork to Grand Prix Racing, the Public Domain has a lot to offer...

## RDS 2.0

**Programmed by: Ben Sutter**
Available from: Your Choice PD

There's a fair chance you'll have seen an RDS somewhere before. A Random Dot Stereogram is a strange type of picture that is supposed to appear as 3D when viewed in the correct way.

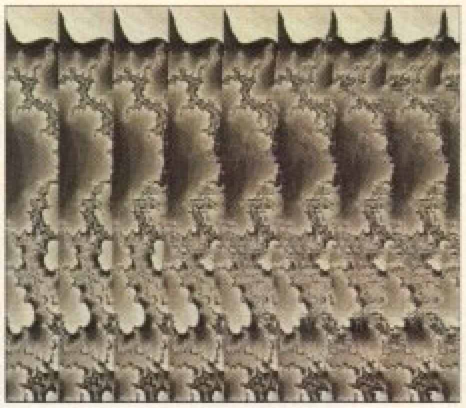
Well now there's a program for your Amiga that allows you to create your own, and also a text file which explains exactly how they work.

If you, like many others, have come across these strange pictures before, you'll either be able to see them or you won't. If you can't then I'm sure you'll agree they can become extremely frustrating and soon you'll convince yourself that they don't exist.

Maybe you should get hold of this offering and lock yourself in your room until you can. Believe me, it can take a while, but it's definitely worth it.

This program allows you take any normal IFF picture (like the ones created in Deluxe Paint) and transform it into one of these magical wonders. The good news is that it works, and it works quite well.

However, RDS is quite fussy in that it only works with some pictures. Generally I found that black and white or greyscales produced the best stereograms, so don't go feeding in some hi-res AGA still as it simply will not work. The is the only obvious drawback to the software itself, which otherwise does a good job.



*Can you see a 3D image?*

The program is menu driven, simple to use, and you should have no problems getting it running. In five minutes you can create your own 3D masterpieces and save them as standard picture files. If you own a printer then there's no stopping you. Great fun.

## Racing Maniacs

**Programmed by: Paul Gaze**
Contact: Paul Gaze

Racing Maniacs is a fast game. It's even faster on an A1200. In fact, it's so fast you'll probably have difficulty playing it at first.

Racing Maniacs is (as you've probably guessed from the title) a racing game in the style of Formula One Grand Prix, and is quite enjoyable.

Two versions of the game are included on the disk; one for AGA machines and another for the opposite. Obviously it's enhanced for the A1200 and runs like a dream.

The graphics are in a 3D style and certainly nothing to boast about – basic green, grey and blue polygons that represent the obvious. The playability on the other hand is where this game wins hands down.

There are a few different options of gameplay such as head-to-head, tournament and different tracks to choose from, but essentially the style of play is the same.

You control a car and race around various tracks against your opponent, with all the usual features of damage, bonuses and – as an added feature – weapons to attack your opponents vehicle with during the race.

You are supplied with four mines for each track, the purpose being to destroy your opponent and claim victory. This adds a little more excitement to the game, especially when racing against your friends.

The best way to describe Racing

## Big Time AGA

**Programmed by: Axis**
Available from: Freestyle PD

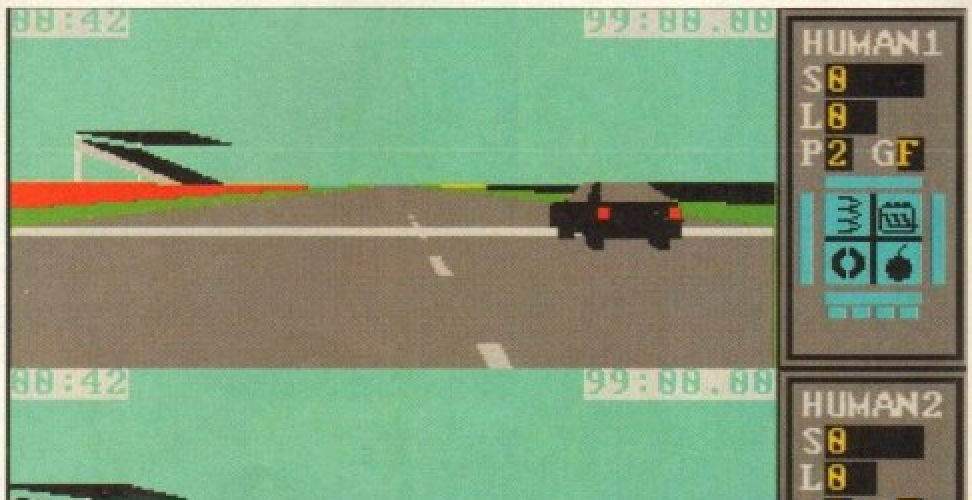
There's a lot of AGA demos floating around at the moment, and here's another to add to the collection. This one is spread over two disks and features some impressive graphics and effects including the usual plasma clouds, hi-res stills, and also some original effects – some of which are quite excellent.

The demo opens with an impressive display of a mountain range, and uses some careful animation and pixelisation to add to the atmosphere.

One thing I realised after watching this particular demo was the lack of any form of spinning objects that normally rule the demo world, and this in itself is promising.

Big Time AGA definitely makes full use of the AGA chipset, with 256 colour pictures and backdrops of a stunning quality.

There's also a thumping tune by Bjork pumping away in the background which lasts throughout the demo and is surprisingly clear.




*Racing Maniacs is the name, Racing Maniacs is the game. High speed driving with a difference.*

ART of the MONTH



*Impressive AGA stills on offer with Big Time AGA*




*Punters: Serious money. Well, maybe not, but still a good laugh.*

Maniacs would be to look no further than the title itself, which summarises the game perfectly.

While Racing Maniacs cannot compete with the likes of F1GP, and is fairly limited due to lacking in that essential "I want more" factor, it is still a good laugh and offers some exciting features. Check it out.

## Punters

**Programmed by: G Smith and R Horn**
Available from: Sanity Soft

Anyone for a bit of gambling? Supplied on an enormous four disks, Punters is a collection of various gambling-related games just perfect to entertain yourself with on a rainy day.

There are five different games in total and up to four people can take part at any one time. There's also provision for single players, although it's not nearly as much fun.

Choose from a quick bash at the fruit machine, a day at the races, a round of Yahtzee, Othello or maybe just a game of Blackjack. Whichever you choose, there are tons of options and features to keep you going.

Although not exactly stunning in the graphics or sound department, most of the games are of an average quality and offer similar features to their real-life counterparts. Nothing special however.

The only major drawback I can see is the disk swapping. The entire compilation is provided on four disks but linked together into one main system, whereby you choose and then insert the required disk.

This can become a bit tiresome, although it is possible to install the game on hard disk which is a relief for some. Maybe it would have been a better idea to supply the games on separate disks (after all, they are essentially separate games) to avoid booting through the menu system and tedious disk swapping.

If you're a particular fan of this sort of entertainment, then Punters is for you. It's nothing special but does offer a good selection of quality games to keep you occupied even on the dullest of days.

## Calling all PD libraries....

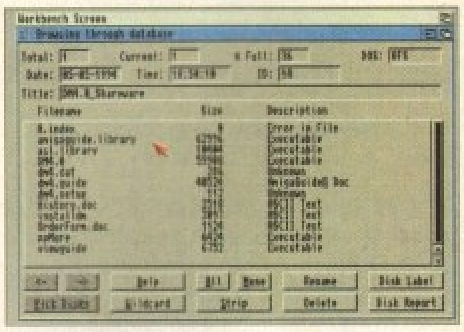
....and individuals with anything remotely worth my while having a peek at. If you want something released as PD, or you're a library with stacks of hot new stuff that you haven't seen reviewed yet, why not drop me a line with a copy, full documentation and everything clearly labelled? I promise I'll at least look at your work.

*Tina Hackett, PD Submissions,*
*Amiga Computing, Europa*
*House, Adlington Park,*
*Macclesfield, SK10 4NP.*

## DiskManager v4.0

**Programmed by: Andrew Woods**
Available from: KEW=II Software
Disk No. U1100

As the title suggests, DiskManager is a disk cataloguing program that allows you to obtain and store information about the



*Store data about your disk collection with DiskManager.*

## Aliens - Special Edition Slides

Available from: Kevin Howell

As far as slide shows go, there are good ones and there are bad ones. This collection of shots from the film "Aliens – Special Edition" unfortunately falls into the latter category.

Provided on two disks, the first major drawback to become apparent is the requirement of an external disk drive in order for it to run correctly. This prevents anyone without an external from viewing the slides and could easily have been avoided with a simple disk swap.

Don't worry though, as you're not missing much. A bunch of poorly digitised, dark and gloomy pictures from the film, these might just appeal to the greatest fans of the "Alien" films.

To add to the insult, the soundtrack is nothing special and so this hardly grips the viewer with any particular interest.

There are hundreds of slide shows for the Amiga, some offering excellent graphics, thumping soundtracks and greater compatibility. Many of them are just one disk in size, and beat this particular offering hands own.

Do yourself a favour and order two slide shows of a higher standard for the same price.



*Sigourney Weaver features in this rather poor quality slide show.*

simple aspects of your floppy disks. Basically, you insert the disk you wish to use and then select the option you require from a menu.

You can use DiskManager to build up your own database of all your floppy disks, holding information such as the files contained, the file system, space left, bad sectors and much more.

Simply by scanning the required disk, DiskManager will display all the necessary information and store it where you like.

Also included are some of the basic DOS commands related to files, such as delete, rename, etc. This is extremely useful for file management and although not giving as much control over your disks than, for example, Directory Opus or Sid v2, is still a worthy feature.

Included is the ability to search through either your whole database or just a particular disk for specific file names, directories and files of a certain size. This is ideal for locating a particular file and its whereabouts in your disk collection.

Although DiskManager does offer an enormous selection of facilities, I didn't find the actual program very appealing, mainly due to the fact that the bulk of the features offered are available using other utilities.

Commercial programs such as Directory Opus, Quarterback Tools and even Workbench and AmigaDOS are generally far superior and also offer greatly used features that DiskManager sadly doesn't.

## First Aid Essentials

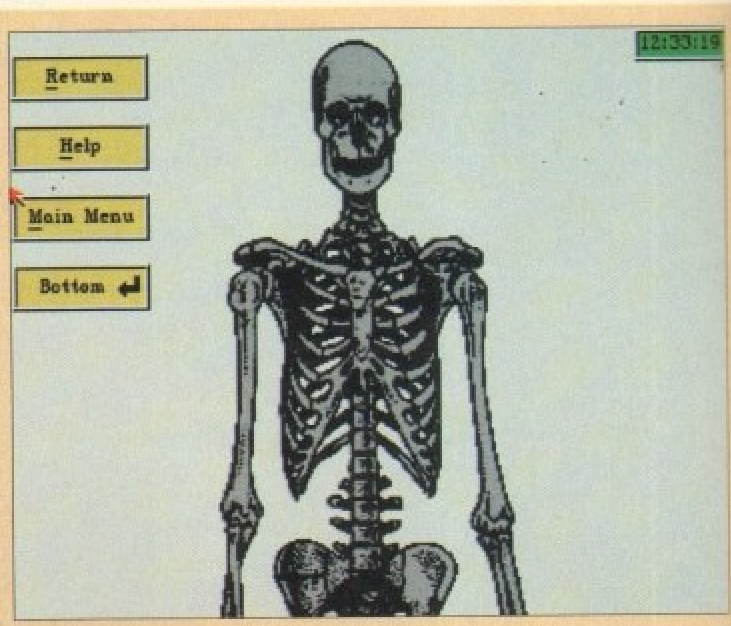
**Programmed by: Gerard Fitzpatrick**
Contact: Gerard Fitzpatrick

The public domain is huge. However, most of the software available tends to be either some form of game or demo and we see little in the way of informative and educational work. Obviously there are such titles, but just a minority compared to the games world.

First Aid Essentials is definitely one of those in the minority and because it's so different, it is likely to be the only one of its kind.

As you may have already guessed, First Aid Essentials is a guide to first aid and what steps or precautions can be taken.

Working from a large database, FAI offers information to the user on all different aspects of the human body – injuries, illnesses etc. It's simply a case of selecting the category from a menu screen to access the information necessary. For example, if you wished to obtain information on food poisoning, select "poisons", then "food-poisoning" and bingo, the information is displayed before you under three headings of symptoms, treatment and causes of illness.



*Check out the human skeleton with First Aid Essentials.*

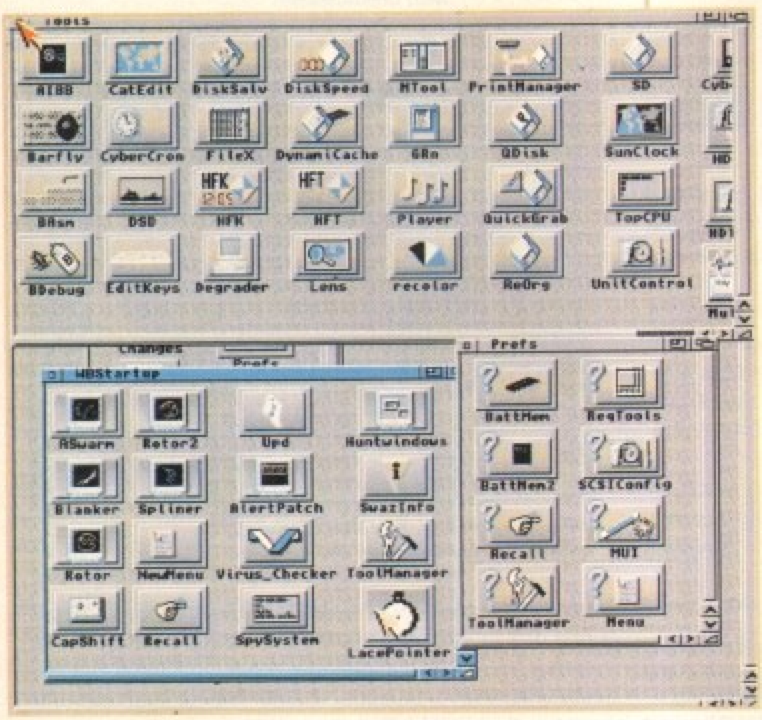
From this database you should be able to find most of the information required. Using First Aid Essentials is just like looking in an electronic book and could prove extremely handy in an emergency. Although this disk will appeal to just a small handful of people, it is a very professional and informative piece of software, and while not being the most interesting of PD titles available, I thoroughly recommend it.

Even if it sits at the back of your collection for an age, the fact that it could come in handy one day is by far enough reason to own it.

## Magic Workbench Extras

**Available from:** Kew=II Software
Disk No. U1096

A while ago now, Magic WB was released in the Public Domain. It immediately shot up the charts as more and more Amiga owners saw it as a way of transforming their Workbench into a completely new and original piece of software.



*Hundreds of icons on offer with this Magic WB upgrade.*

In fact, they were wrong. All Magic WB consists of is replacement backdrops and icons, and essentially does not alter the software at all. However, it gave Workbench a new and more attractive look and many Amiga owners opted for its more professional style.

There was just one main problem concerned with Magic WB. Now the Workbench backdrop and icons were of a similar theme, any other icons (of utilities or games etc) unfortunately looked out of place with their old style blue and grey design, ruining the effect that Magic WB creates.

Although it is impossible to solve this problem completely (short of designing your own icons) the author of Magic WB has done his best to prevent it, and has now released a whole disk full of replacement icons (and backdrops) for most of the popular AmigaDOS utilities.

Included on this disk are icons for the likes of DPaint, ADPro, Directory Opus, Disksalv, and loads more. There are also alternative icons for some of the earlier Magic WB offerings and some new ideas such as icons for certain types of files, for example graphics or sound.

If you weren't satisfied with the selection of backdrops with the first release, then have a browse through the drawer of replacements, some of which are quite interesting.

If you have Magic WB installed on your Amiga, then this disk is an invaluable upgrade and should definitely be considered. You may not use all the files offered on the extras disk, maybe just a few, but even if only for the choice or a little alteration this disk is worth getting hold of. Your Workbench should be left looking even better than it did before!

## Lay your hands on me

**Paul Gaze**
9 Larch Close, Kingsworthy,
Winchester, Hampshire SO23 7NE.
Tel: 0962 882819

**Your Choice PD Library**
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Tel: 061-881 8994

**Kevin Howell**
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Bristol BS4 3SD

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Tel: 0922 404023

**Sanity Soft**
217 Albert Road, Aston,
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Tel: 021-327 8574

**Kew=II Software**
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U001 +A-GENE program helps you trace your family tree
U002 +AMIGA SYSTEM TESTER C.L.I. base tester
U088 LABEL DESIGNER Good labels designer
U101 DATA BASE WORKSHOP (2 disks) Database compilation
U144 AMIGA FOX D.T.P. Desk Top Publishing for the Amiga
U145 XCOPY PROFESSIONAL Very easy & powerful disk copy
U146 C-MANUAL II (4 disks) Teach you how to program C
U160 600 BUSINESS LETTER ready type business letter
U169 PAINT AND ANIMATE Tool to paint and animate
U170 BIORHYTHMS v4
U195 AMIBASE-PRO II regarded the best & easy to use
U220 AMOS PAINT Easier to use than D-paint
U233 SPEECH TOY Make your Amiga speech more human
U242 IMPLODER 4.0 Make more programs fit on one disk
U250 +VIDEO TOOL (3) Lot of Video titler & programs
U284 COPY & CRACK TOOLS large collection disk copier
U287 P.C. PASCAL (2) Good Pascal language (not A1200)
U300 MESSY SID II read/write PC/MAC etc files
U331 POWER-MENUS Very easy to use menu program
U334 EMULATOR COLLECTION II A64, PC, Mac, PC task, QL etc emulator (500 1.3 only)
U335 FREE COPY V1.8 Copy some commercial games
U343 LITTLE OFFICE Our best seller yet. Collection of the best of Wordprocessor, database & spreadsheet
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U609 MICRO BBC A/B EMULATOR Fully emulate the BBC computer + tutorial
U621 HOW TO CODE IN C (2 disks) Teach you how to Code in C (machine code)
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U650 COPY & CRACK TOOL 2 Latest copying tools
U651 C MANUAL 3 (12 disks) This is the big one, the latest in C manual. Ideal for learning C
U678 RS DEMO MAKER 2 (2 Meg) (not A500 1.3)
U622 MAGIC WB Improve your workbench environment
U681 TEXT ENGINES V4.1 the latest with 36,000 word spellchecker. Totally recommended
U682 ASTRO 22 V3 (new) Calculate star/sun position & star sign etc. Very accurate to 38 minutes
U683 DOS FILE PROTECTOR protect any text
U685 DISK MANAGER V3 catalogue file on your disk
U686 VIC-20 EMULATOR (new) games available soon
U689 FORCASTER V2 horse racing prediction game
U690 ASSASSIN COPIER collection of 9 copiers
U694 SUPER DUPER III very fast copier
U700 ANIMATION CONSTRUCTION KIT V1.2+
U702 V MORPH V2+ Create Terminator 2 effect
U703 POOL TOOLS 2L (new) horse racing prediction
U705 TRONI-CAD Create circuit boards, few examples include a sound sampler & modem etc.
U707 GAME TAMER V4 For even more games cheat
U712 EDWORD v8 PROFESSIONAL the best wordprocessor
U713 CDTVv2 PLAYER Lets you play CD while in WB
U718 MAGNUM 1.7 Latest in disk magazine creators
U721 FONT FARM V3 font + brilliant IFF font viewer
U722 EASYCAL+ sheet available yet with tons of features eg print & with max 92583 cell available
U724 PARNET SET UP WB (2 DISK)
U726 PARNET CABLE MAKER INSTRUCTION
U731 A-Z CHEAT 529 different games cheats
U727 AREX MANUAL tutorial on AREXX
U728 MENU MASTER V3 menu program with password
U730 SOFT AGA EMULATOR (A500+ A600 ONLY) min. 1.5 meg
U736 AWARD MAKER It makes awards easy 200+ included
U738 S. KICK PROFESSIONAL v3.2 (WORKBENCH 2/3 ONLY) 3 versions of the A500 emulator (NEW)
U742 HOW TO CREATE AUTOBOOT DISK self explanatory
U743 UTILITIES DISK MAKER 3 create auto boot disk. Ideal companion with above, recommended
U744 FRACTAL MANIA 93 & Biomorphs
U746 GARDEN DESIGNER design GARDEN with shrubs, trees, footpaths etc in full 3D
U747 ASTRONOMY V2 new latest version
U748 ILLUSIONS draw colour cycling effect
U749 DISK REPAIR 3 - 11 disk repair program
U750 MUSIC CATALOGUE (not A500 1.3) catalogue all your music collection
U751 SYSTEM CHECKER TOOL many system tester util
U752 EPU STACKER (not A500 1.3) EPU will double the storage capacity of your HARD DRIVE & DISK DRIVE
U754 PARBENCH installer (complete) connect any 2 Amiga/cds etc (Just requires Parnet cables)
U755 PRO CAD electronic. The latest circuit board designer, easy to use with examples circuit
U757 150+ PRINTER DRIVER Contains over 150 printer drivers for all sorts of printers
U760 ICON PLUS 1, 2 & 3 (3 DISKS) Hundreds of stunning WB2 or above ICONS
U761 RELOCKIT 1.4 (not A500 1.3) new A500 emulator)
U777 TELETEXT RECEIVER (build a teletext receiver)

## GAMES

G096 POPEYE LCD C64 classic conversion
G112 CUBULUS puzzle games based on a RUBIK CUBE
G222 MEGA 21 GAMES collection of 21 game packs
G235 DRAGON CAVE The best animated 3D puzzle game ever. Very similar to Dungeon & Dragon type games
G257 SCRABBLE high quality board games conversion. Up to 4 player or play with computer. (not A1200)
G256 INSIDER CLUB buy/sell Stock Exchange games. Share objective of the games is making money
G272 TANK BATTLE Brilliant 2 player game
G274 MR DUG Arcade conversion (few years back)
G329 MADONNA NUDE PUZZLES 15 puzzles (jigsaw game)
G330 TOP SECRET Brilliant platform games similar to OCEAN RAINBOW & PARASOL (not A1200)
G333 CYBER-NETIC regarded the best defender type games with all usual powerup. Recommended
G334 DONKEY KONG Rescue your girlfriend (not A1200)
G335 CRAZY SUE 2 cute platform games. Brilliant graphics
G356 WONDERLAND brilliant Mario Brother games clone
G362 DELUXE PACMAN Still the best Pacman ever released
G366 BINGO CALLER Amaze your gran with this fully speech bingo caller
G373 AIR ACE II Very playable ZENON 3 shoot games
G389 CASINO GAMES Lots of casino type games
G390 TETREN tetris clone (90% mark in AMIGA FORMAT)
G393 BUBBLE GHOST Game boy conversion & very playable
G400 FIGHTING WARRIOR PD version of Street Fighter 2 amazing large graphic & it is £23.99 cheaper
G410 FATAL MISSION Nemesis clone with 1 or 2 player
G417 FIVE STAR 22 PUZZLE PACK Amazing collection of 22 puzzle type games, our top seller
G422 SERENE 3 similar to the commercial game ZENON
G435 ROULETTE the best Casino roulette simulation yet
G438 TRAILBLAZER conversion of the C64 classic game
G441 E TYPE 2 the best asteroid clone ever
G443 OLYMPIAD DISK (2 disk) Sport even with Lemmings as the star (very good)
G460 WIBBLE WORLD GIDDY Brilliant platform game with very large & cute graphics similar to the DIZZY series
G470 BALL LIGHTNING 1 or 2 player multi level platform
G490 MEGA BALL 2 new & highly playable breakout
G500 TRANSPLANT Voted the best game of 93, brilliant E-TYPE clone but much better, loads of power up & level
G502 DRAGON FIRE Excellent graphics (A500 only)
G519 LABYRINTH II Very good text only adventure.
G520 FATAL MISSION 2 (new see G410)
G521 FRUIT SALAD VG collect/ platform type games
G530 MAD FIGHTER (A1200 only) Superb street fighter 2 clone with very large well animated characters
G531 OPERATION FIRE STORM detailed graphic platform games with lots of action/shooting element. Brilliant
G532 AGA KLONDIKE (A1200 only) (3 disks) the best card games yet & each card has different glamour girls pic
G535 BLACK DAWN the best RGP games yet similar to HIRES GUN, very highly rated in most Amiga magazines
G540 ORK ATTACK Very bloody shooting games with large & detailed graphics
G545 KUNG FU CHARLIES Very playable platform beatemup
G546 RAID 4 refined vertical scroll shoot em up
G560 IMPERIAL WALKER Take control of an X wing fighter in this 3D game
G567 STAR BASE 13 (2 DISKS) Brilliant graphic Epic adventure like Monkey Island 2. Recommended
G568 MONACO Fast furious racing games
G569 SUPERIX Birds eye view Formula 1 racing games
G525 GRAND PRIX MANAGER 93 Very good management type games, use point & click system, good
G526 MENTAL IMAGE 1 contains 3 games
G527 MENTAL IMAGE 2 contains 3 games
G528 MICRO MARKET well presented stock market games
G529 SKID MARK extremely realistic & very playable 4 x 4 of road racing games
G534 CASTLE KUMQUAT Very good overhead (like Alien Breed) games puzzle with lot of inter connect level
G542 ROAD TO HELL Brilliant 1 or 2 player overhead view car racing games with engine upgrade option etc.
G544 SUPERTOM CAT New vertical shoot em up games
G546 RAID 4 more refined vertical shoot em up
G657 AMOS LOADSA MONEY another very good fruit machine simulation with exceptionally large reel
G659 MR MEN OLYMPICS (2 DISKS) take Mr MEN through 5 events including 100 metres, javelin, hammer, high jump etc.
G660 L.C.D. DREAM Straight conversion of 4 LCD games includding Octopus, Parachute, Fire Attack, Oil Panic
G661 POP QUIZ Answer by click on A, B or C box
G662 JELLY QUEST 3D colouring games similar to q bert
G664 NEIGHBOUR GAMES (2 DISKS) graphic adventure
G667 GOLF (2 DISKS) One of the first PD GOLF games
G668 AMOS CRICKET 2 New Amos cricket simulator, very playable if you like this sort of game
G669 MUGSYS REVENGE gangster/graphics adventure
G670 ESCAPE FROM DOOM animated graphic adventure
G671 DUNGEON FLIPPER This is the first & only Pin Ball
G672 JIGSAW (2 DISKS) Jigsaw games
G673 "BOBBY" GARDEN + DIGGER (NEW) 2 digger type
G674 HIGH OCTANE (NEW FASTER VERSION) not A500 1.3
G675 TIME RUNNER III very similar to the FLASHBACK

MORE GAMES PLEASE ORDER A CATALOGUE DISK

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E002 COLOUR KIT Colour book for kids
E003 TREASURE SEARCH Find the hidden treasure
E004 LEARN & PLAY I (not A1200) Maths & games
E005 LEARN & PLAY II for kids (order together)
E006 SPANISH TRANSLATOR (English to Spanish)
E008 MR MEN (A500 only) Story adventure
E009 ASTRONOMY tutorial on solar, star system
E010 SIMON & SPACE MATHS Maths & Simon games
E011 EDUCATION PACK 1 (5 disks) Lots of education programs range from Maths to games. We recommend you buy this collection
E019 DINOSAURS Explains what is a dinosaur
E021 STORY LAND II Interact puzzle game with 4 worlds to visit & solve (buy it....recommended)
E022 LANGUAGE TUTOR 4 languages
E023 TALKING COLOURING BOOK Very good Art/Paint package that talks
E024 EASY SPELL II Improve on their spelling
E025 SCRABBLE (not A1200) board game
E026 WORDS Can help you solve crosswords
E027 OSWALD large cartoon game kids will love
E31 IQ TEST + IQ GAMES Great to test your IQ
E33 +KEYCLICK II Good typing tutor
E35 CHESS HELPER chess tutor program
E38 AMIGA TUTORIAL explains about AMIGA
E39 COMPUTER CARE
E40 +GUIDE TO LOWER BACK PAIN Tutorial on the spine & how to avoid back pain
E42 +FRACTION & SILQUEST 2 good Maths programs
E44 STEAM ENGINE V2 Cut away animation of the Steam Engine
E45 PETROL ENGINE Cut away animation of the petrol engine
E46 GAS TURBINE ENGINE Cut away animation of the gas turbine engine
E54 DEMOLITION MISSION Simple game for kids, destroy buildings
E57 APPLE CATCHER Good graphics easy to play
E58 CROSS MAZE & CRYPTOKING
E59 VERB QUIZ Testing you or your child the word & it related
E61 KING JAMES BIBLE (4 disks) A complete bible on 4 disks fully menu driven
E70 +MATHS DRILLS Help kids improve maths etc
E071 +ERROR INFO Gives info on error guru message
E074 +AMIGA BEGINNER GUIDE
E075 +WORLD WAR 2 2nd World War with maps/pics
E076 SCIENCE (4 disks) Excellent mix of physics, chemistry & science programs. Recommended
E080 KIDPRIX New paint package specially for kids
E081 ASTRONOMY (4 disks) Plot sun location, find star, solar position etc
E090 KID D.T.P. Easy desktop publishing for kids
E092 SING ALONG RHYMES + Jack & Jill. V GOOD
E094 HIGHWAY CODE TUTOR - QUESTION 7 ANSWER Teach you all the highway code signs
E096 READ & LEARN With the 3 little piggy story
E097 BACK TO SCHOOL 1, 2 & 3 (3 disks) Lots of games and educational programs for kids, recommended
E100 LITTLE TRAVELLER Info on world wide places
E101 WORLD GEOGRAPHY map of the world & Britain
E103 DISCOVERY OF THE ATOM (2 disks) tutorial
E104 DESK TOP GUIDE TO MUSIC (3 disks) Massive tutorial guide to making music, recommended
E107 TRUMPTY FIREWORK ALPHABET Very entertaining way to teach your child the alphabet, fully animated
E109 MR MEN OLYMPIC (2 disks) large Mr Men characters as the stars even for this Olympic. Recommended
E110 CULT TV DATABASE (2 disks) info on early TV films
E115 ELECTRONIC WORLDS (3 disks) new K. James bibles
E116 HOW THE EARTH BEGAN Info on the Big Bang
E117 PAINT BOX DEMO kid's paint program
E118 WORKBENCH 2 Tutorial (user guide)
E119 DINO WAR Quiz on dinosaurs
E120 JUNIOR MATHS with very colourful graphics
E121 PICTURE PUZZLE Fancy a game of JIGSAW
E122 WORD FACTORY Brilliant, spelling type games
E123 KID DISK 1 best education program includes COLOUR THE ALPHABET 2, Paint etc.
E124 KID DISK 2 more high quality education
E125 JURASSIC PARK must for all dinosaur fans
E126 CHILDREN'S SONGS 2 - 5 excellent children's songs
E127 MING SHU (A500 only) Chinese Astrology
E128 ASTRO 22 PRO V3 latest astrology program
E129 KID DISK 3 (DTP) (follow up Kid Disk 1 & 2)
E130 FRENCH VERB TESTER - helps you with French
E131 CULT TV DATABASE II (2 DISKS)
E132 PHOTOGRAPHY - the Darkroom Brilliant demonstration, how to develop (photo) film. Recommended

More education software in catalogue disk

## 18+ DEMOS

| | |
|---|---|
| 0001 +Showering Girl 5 (4) | 0030 +Mega Maid* (4) |
| 0003 +Bodytalk (2) (4) | 0031 +Calendar Girls (4) |
| 0006 +Viz Calendar 1990 (4) | 0032 +Mayfair (4) |
| 0007 +NIGHTBREED (4) | 0033 +Utopia (4) |
| 0009 +Maria Whittaker (4) | 0045 +Girls of Sport (4) |
| 0024 +Sabrina Special (4) | 0049 +Page 3 Girl (4) |
| 0025 +Ole Flikinger (4) | 0070 +Gon Gon Girls (4) |
| 0026 +Madonna Early Days | 0071 +Tina Small (4) |
| 0029 Kathy Lloyd* | |

## DEMOS

D011 MULTITASKING Demo of what is multitasking
D016 DEAD DANCE THRASH good dance music based demo
D050 PINK FLOYD THE WALL (6 disks) Massive music & demo lasts a long time (requires 2 disk drives)
D091 STAR WARS DEMO (2 disks and A500 only) Super starwar demo, lots of X wing anim
D107 ODDYSEE (5 disk & A500 only) Incredible 40 minute space epic journey movies. Recommended
D118 STAR TREK MEGA DEMO A (A500, A1200)
D120 1911 VOYAGE Brilliant demo lot of fill vector
D152 THE ELECTRIC TOUCH Multi scroll vector etc
D174 ACID MIX 5 brilliant acid track
D261 FONTIER Incredible Elite 2 demo animation
D251 MANGA WORLD Brilliant manga slideshow
D252 JAPANESE LANG Learn how to speak Japanese
D253 SUNTEAM GG ESWAT Eswat games
D254 AKIRA DEMO Akira Manga demo
D255 TROOP JUGERNORT 1 Story & games
D256 MANGA WORLD 2 More Manga slide show
D257 SUNTEAM QUIZ Quiz
D258 MAKE IT SO EASY Guess

## A1200 ONLY

AGA001 EXTENSION DEMO Stunning demo with fast landscape anim and a rotating city, receive 90% in CU
AGA002 FRACTAL GENERATOR(NEW) Create stunning fractal in 256 colour
AGA003 WORKBENCH HACK Load of hack/toy/blanker etc
AGA006 NEW SUPERKILLER Know & kill 316 types of virus, well recommended
AGA007 MINDWARP one of the very first demo for the A1200
AGA011 SLEEPLESS NIGHT 3
AGA012 PLANET GROOVE release by Team Hoi
AGA013 MOTOR INVADER 2 (2 Disks) Very playable INVADER clone set. Recommended
AGA015 POINT OF SCALE Stunning vector demo came direct from France
AGA016 CHROMA good demo
AGA017 WORLD OF MANGA AGA (4 disks) Load of cute Manga disc slide show in stunning 256 colours
AGA021 MAGIC WORKBENCH Improve the look & add extra command to your Workbench (HD required)
AGA023 U-CHESS the best chess program so far, stunning graphic but requires 4 megabytes
AGA024 WORKBENCH 3 SCREEN Great back drop for A1200 (not for beginners)
AGA41 GIF BEAUTIES VOL 1-10 Available each disk auto boot & contain loads of stunning pics of raunchy women. Note fully compatible with any Amiga
AGA062 BODY SHOP VOL 1-7 Available (2 disks each) See description above (A1200 only) & order with volume number 1 to 7 (2 disks per volume)
AGA080 FIT CHICK VOL 1-5 Available (2 disks each) see description above (A1200 only)
AGA90 ASSASSIN FIX DISK 1 brilliant collection of degrade utilities for running non compatible software, we recommended you get this 2 disk now
AGA91 ASSASSIN FIX DISK 2 (new) latest contained more degrade utility (see above) Recommended
AGA94 RELOKIT V1.4 latest, run A500 SOFTWARE
AGA97 A1200 UTIL - AGA TESTER, SYSINFO etc.
AGA98 ACTION REPLAY V4 Complete ACTION REPLAY on disk
AGA99 MADFIGHTER 2 brilliant street fighter clones
AGA100 AGA BLITZ SCREEN BLANKER
AGA101 FAST GIFF 2 display GIFF pic in Workbench
AGA102 AGA DIAGNOSTIC - NEW system tester
AGA103 BLACK BOARD AGA decent image processer
AGA104 REND 24 Similar to above
AGA105 QUICK GRAB AGA - can grab AGA screen
AGA110 WORLD BEYOND 1 (3) stunning 250 COLOUR fantasy art, leaves Atari users breathless
AGA114 SMELL LIKE CHANEL NO 5 brilliant demo
AGA121 MAGIC FACTORY (1-5) STAR TREK stunning 256 colour raytrace startreks, brilliant
AGA133 AGA UTIL v1 AGA util compilation
AGA134 AGA UTIL v2 more AGA util compilation
AGA135 AGA UTIL v3 more of the above
AGA136 AGA UTIL v4 even more of above
AGA137 IMAGE PROCESSOR IFF picture processor
AGA138 MULTIBOOT - 4 various versions A500 EMU
AGA139 WB3 HARD DISK PREF & INSTALLER installing WB3/prefect the hard disk
AGA140 CROSS DOS PLUS v5.1 read/write PC files

SEE GAMES, UTIL ETC. FOR MORE A1200 SOFTWARE

## ANIMATIONS

A013 SPACE PROBE search for alien lifeform
A022 LUXO TEENAGERS Incredible ray trace animation
A072 LIFE A BITCH (18+) We all know life's a bitch
A179 THE LIVING WORLD SLIDESHOW
A187 PERIL OF THE DEEP (2 disks) Incredible slideshow of very big sea creatures
A193 NEMESIS COMIC Animate comic set in space
A215 MADONNA 3 (3 disks) Madonna fans, get this, a must!
A251 ALIENS The best Alien slideshow & demo
A293 MANGA COMIC Cute, chic and robot slide
A302 CAT SLIDESHOW For all cat lovers
A336 FAST CAR (Not A1200) & expensive car slide show

## MUSIC

M001 BEASTY BOYS Good , We Want Some Pussy songs
M002 MICHAEL JACKSON Brilliant song of "BAD"
M005 +100 C64 TUNES 100 C64 Games Music
M072 +MADONNA songs from the hanky panky album
M076 POPEYE meet the Beast Boy, very good
M156 +CD PLAYER Simulate a CD player
M160 +I AM TOO SEXY (2 disks) full song
M194 JESUS ON E'S (2 disks) Super music disk
M262 A-Z TUNES (4 disks) hundreds of C64 games music

## NEW

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U746 C64 EMULATOR V3 latest release much improved & Commodore 64 emulator (2 disks)
U744 SID Professional. New release disk utilities
U773 AGA ACTION REPLAY IV PRO New & updated
U781 SNOOP DOS V2 latest release
U782 CITIZEN PRINT MANAGER for Citizen printer
U740 SCREEN BLANKER large collection (excellent)
U789 HD MEMORY v2. Use Hard drive as extra memory
X075 MADONNA SEX (3 disks) 18+ only
X074 ADULT JOKE (18+ ONLY) Hmm
U761 RELOCKIT 1.4 Latest A500 emulator
U726 AREX MANUAL tutor on AREX (WB 2/3) only
U752 EPU STACKER Double the storage space on your HD work on normal disk drive
U750 MUSIC CATALOGUE specially for tape, CD etc.
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U750 MR BACK UP Professional back up HD etc
U784 DMS Professional v2 Compress 2 disks into 1
U783 POOLS WINNER GOLD 1 Pools prediction
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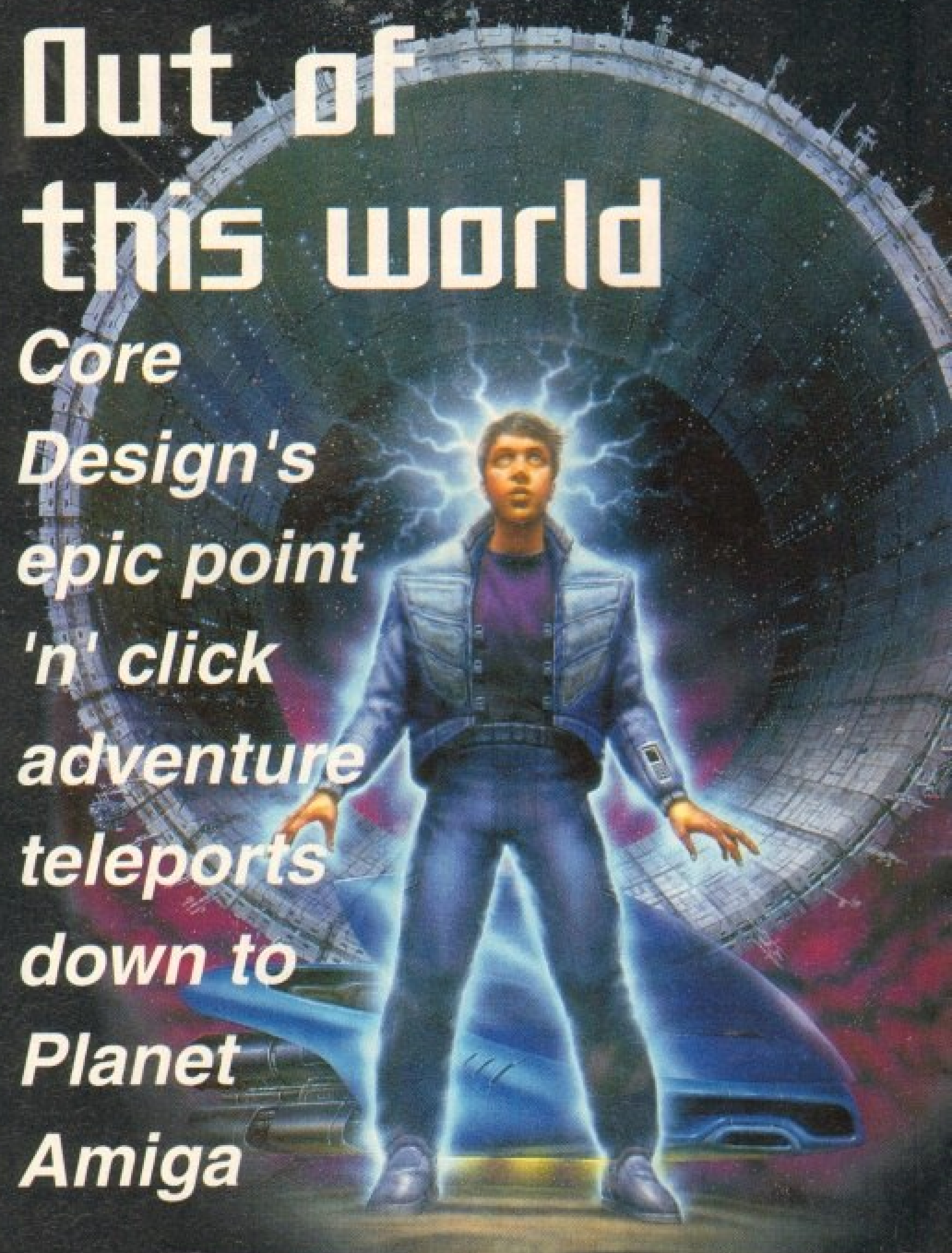
# SYSTEM

Your essential guide to the world of Amiga gaming



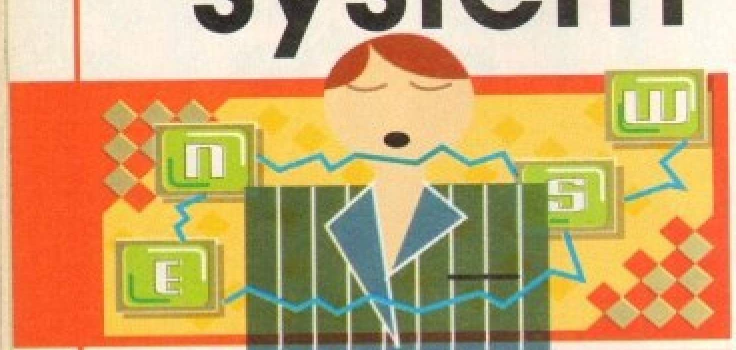
# UNIVERSE

## Out of this world



*Core Design's epic point 'n' click adventure teleports down to Planet Amiga*

# system online



**Yet another bout of news from the world of Amiga gaming. If you want to know what's going to be hitting the shop shelves soon, read on.**

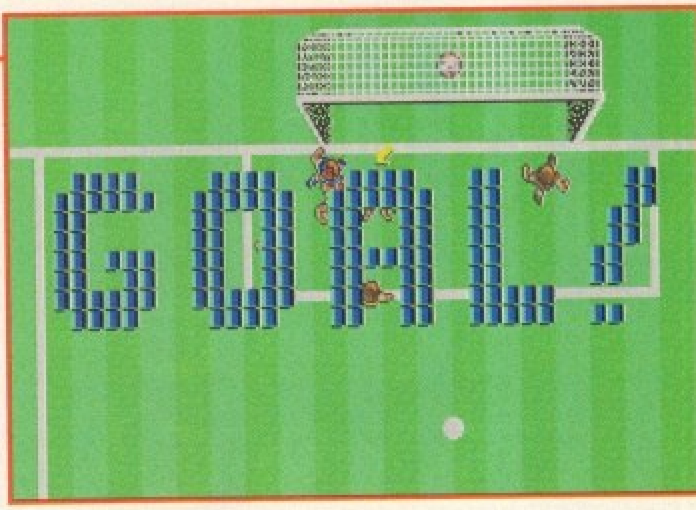



## Budgets under a bluey!

The Birmingham-based software house US Gold has just announced the launch of 15 titles on their Kixx budget label.

The titles include 3D Pool, Action Fighter, Bionic Commando, Blasteroids, Carrier Command, E-Motion, Indiana Jones & The Last Crusade, International Soccer Challenge, MicroProse Soccer, Out Run, Rick Dangerous, Rick Dangerous 2, Streetfighter, Stunt Car Racer and last, but by no means least, World Class Leaderbord.

All the titles are priced at £4.99, so there is no excuse for not running down the shops to buy a couple of new games. All the products should be in the shops by the time you read this.

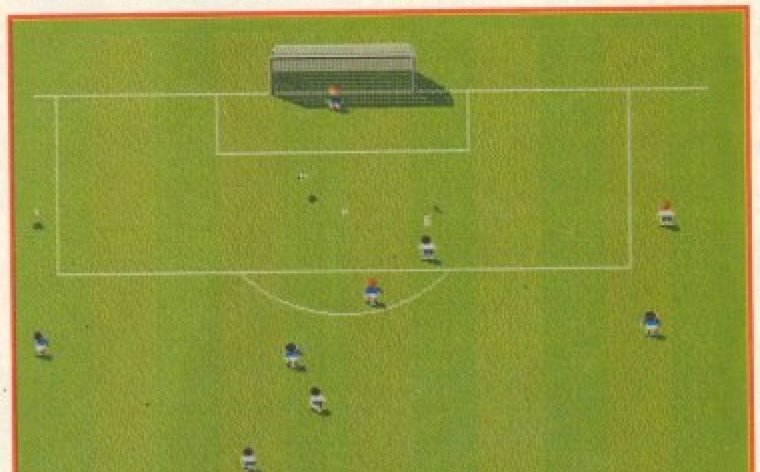



## Going for goal!

The World Cup is now over and I bet you've been as surprised as System at the amount of football games sitting on the shop shelves. You'll not have been able to afford all of them, but Empire have come up with what is surely the best-ever football compilation pack.

Empire World Cup Year '94 contains Sensible Soccer, Goal, Championship Manager '93 (plus it's '94 data disk) and Striker. For football aficionados this is surely a compilation sent from heaven, but I suppose the majority of games players have got at least one out of the four games.

If you haven't got any of these games then this is your lucky day, because Empire World Cup Year '94 costs only £25.99 which works out at about £6.50 per game.



## The biggest game of '94?

Millennium, the Cambridge-based software house responsible for such hits as Brutal Sports Football, Diggers and the James Pond series of games, claim to have bagged the biggest games licence of 1994.

The game is Mr Blobby and it will feature 60 levels of madness, mayhem and some darned fine gameplay to match. By the time Christmas comes around, you won't be able to move without bumping into Noel Edmonds' pink and yellow creation.

Noel's House Party is watched by 13 million viewers and Blobby has even appeared on the front pages of the New York Daily News and the Washington Post.

Noel Edmonds, so confident of Blobby's forthcoming success has already launched a number of Theme Parks in the UK which are attracting up to 10,000 visitors daily.

By the time the game arrives, a second hit single will be clambering up the charts and there will be over 260 Mr Blobby licensed gifts and products on the market for you to buy.

I'm still unsure, simply because I can't stand Mr Blobby, but we shall see when the game arrives on all Amiga formats this Christmas.

# Happy Daze are here again

Daze, after the tremendous success of Stardust, are back on the Amiga with two brand new releases to keep you entertained during the autumn months.

The first is the German-designed football management simulation entitled On The Ball: World Cup Edition. Developed by Ascon, you begin the game as manager of a national soccer team, facing the first few qualifying rounds of the world's greatest sporting spectacular with the desire to go all the way and win the trophy.

On The Ball features unique TV style coverage of each match with exciting action replays from various different vantage points around the stadium. A running commentary is also provided to add to the atmosphere.

The graphics are actual animations and not jerky computer generated images. On The Ball has apparently sold loads of copies in Germany and now Daze are hoping that it will do the same here in Great Britain.

On The Ball looks like a breath of fresh air in the world of computer football management simulations and should be out in the shops by the time you read this. Daze's second offering is the third part in the epic Ishar series of RPG/adventure games. The games have become extremely popular over the last two years, mainly due to Silmarils' efforts in the graphics department.




*On the Ball is a brand new football management simulation which features amazing match animations as well as unique TV style coverage*




*The third part in the Ishar series of adventures, created by top French developers Silmarils, should be on your local shop shelves now*

This time the French software house have included animated film sequences, quantum leap time travel, teleportation, character manipulation, detailed maps and even more spectacular locations.

The evil wizard, who you thought you'd killed at the end of the second Ishar game, is back! Time is the main element in this third and maybe final game in the series. To kill the evil wizard Shandar, you must travel back in time and make your way through a series of time gates.

Ishar 3 has a scheduled release date of September and will cost you a mere £32.99. An A1200 enhanced version will arrive at around the same time, but at the slightly higher price of £34.99.

# Streets ahead




Street Fighter 2, the world's greatest beat-'em-up (allegedly) is going to feature in its own monthly comic. The Japanese "Manga" style strip will feature all the characters from the top-selling computer game, as they take part in the ultimate Street Fighting tournament, set among the criminal underworld on the Island of Shad.

Street Fighter 2 is the first new title from Manga Publishing, the newly-formed comics division of Manga Entertainment, producers of the best–selling Managa video line. It promises to combine all the action and excitement of one of the world's most popular video games.

The comic strip is written and drawn by Masaomi Kanzaki, one of the top artists in Japan, whose other work includes the popular Manga video, Xenon.

Each issue will feature a 32-page full colour story, plus a pull-out poster featuring characters from the game. The first issue spotlights the hero Ryu.

As an additional bonus, a free pack of Super Street Fighter 2 stickers from Merlin Entertainemt will be given away with the first issue. The comic will go on sale for a measly 95p.

# System Technology

**The world of computers is ever-changing and System is here to keep you aware of what else is happening throughout the industry.**

- A home VR unit is finally on its way and could even be in UK stores in time for Christmas. US firm Forté Technologies is making plans to launch its standalone unit, beating rivals such as Sega and Atari to the market.

  Called the VFX1, it is due to be launched worldwide in November and is expected to cost around the £650 mark.

  It's fully PC-compatible, weighs less than two pounds, supports a standard VGA video card and slots into the back of a PC. Several top titles will be available by the time of the launch, including Doom by Id Software.

- The Jaguar is arriving on these shores in greater quantities, thus SDL have reduced their RRP to just £229. Jaguar games from SDL include Crescent Galaxy, Dino Dudes, Raiden, Tempest 2000, Brutal Sports and the PC smash-hit, Wolfenstein 3D.

- With the 3DO planned to hit the UK high-street stores, news has been leaked about a new 3DO compatible machine code-named the Bulldog. Scheduled for release at Christmas next year, the machine is said to boast some impressive specifications.

- Nintendo Ultra 64 (the new name for Project Reality) was just one of the machines on show at this year's Summer CES in Chicago. Also on show at the CES, which boasts the largest gathering of video game companies to ever assemble under one roof, was the 3DO and the CD drive for Atari's 64-bit Jaguar.

- There is a Super Street Fighter 2 motion picture being filmed in Bangkok as you read this. The film is under the direction of Steven de Souza and is expected to be completed in time for a stateside Christmas release.

  Jean–Claude Van Damme stars as Guile while Raul Julia plays the evil M. Bison, but perhaps the biggest news of all is that Aussie actress and top popstrel Kylie Minogue will play the part of Chun-Li.

# System Selections

**Out of touch with the latest Amiga games scene? These elite selections from the last few months should put you back on the right track**

## Arcade Pool

Arcade Pool can now be added to the list of Team 17 budget successes.

The game may have very nice graphics, but it's in the playability department where it excels.

There are so many different game styles that you'd be hard pressed to become bored with this piece.

For just under a tenner it is an amazing bargain, especially when you consider that it has actually been in development longer than most full-price games.

## James Pond 3

Highly original it might not be, but fans of the previous games and platform lovers will be absolutely besotted with the third instalment. For sheer enjoyment and lastability, you'd have to go far to find a better platform game than Millennium's tasty third fishy adventure. If you're yearning for some fast, frenetic platform jumping fun, then I suggest you splash your cash on James Pond 3. You will not regret it!

## Benefactor

Benefactor is the best thing Psygnosis has released in a long time. It feels like a montage of Flashback and Psygnosis' very own genocidal pets, the Lemmings. Both the graphics and sound have been implemented very well. The variety of both location and puzzle aspect of Benefactor make it an engrossing challenge.

Benefactor is the type of title that will keep the most dextrous platform freaks and puzzle lovers alike twiddling well into the wee hours.

## Banshee

I do like this game and the weirdest bit is, I've never been a fan of shoot-'em-ups! They usually bore me to bits, but Banshee has that elusive quality that drags you in. Each level demands new challenges which are genuinely tough, and the learning curve is just right. This is an intense and extremely satisfying game that should tempt any games fan with an ounce of adrenaline in their veins. The Harvey Keitel of shoot-'em-ups.

## Qick The Thunder Rabbit

Casting aside all previous platform games, Quik is really a perfectly funky little game. Admittedly, my first reaction to a platform game about rabbits was not printable in a family publication, but I was won over by the sheer professionalism of it all. It's probably more suited to younger players, due to it's simplicity and cuddly approach, but despite every aspect of it screaming "cliché" it comes across as a very fun game.

## King's Quest 6

Adventure fans will be delighted that Sierra have finally decided to release the sixth adventure in the King's Quest series onto the Amiga. As far as adventure games go, they don't get much better than this.

With it's brilliant graphics, a fairytale of a plot, superb playability and a level of addiction that will keep you coming back for more and more, King's Quest 6 is an adventuer that should have a place in everyone's games collection.

# The scores on the doors

**System has a different scoring system than any of our competitors, so before you continue reading the mag, glance at the words below t o find out exactly how it works.**

I'm sure many of you are now familiar with our new scoring system, but for those reading *Amiga Computing* for the first time and those who might have forgotten exactly how it works, here is our guide to the System scoring, err system.

In our opinion, review scores have lost their context as a percentage; some products receiving scores which were only a few percentage short of being the "perfect" game, when in truth they were only marginally above average.

OK, so the scores might seem unnaturally low at first, but that's only because other scoring systems tend to be on the high side and perhaps not as comprehensive or honest as they could be.

In the long run you'll receive a more concise and reader-orientated review that's geared towards the consumer.

0-20 This is given to the lowest of the low

21-30 An all-round poor game that may have a single saving grace

31-40 Just below the average, perhaps let down by a few indiscretions.

41-55 Games of this score are roughly average with 50 being a perfectly average score.

56-66 This is an above average game and is worth buying. For this reason it would be awarded the BRONZE award.

AMIGA BRONZE AWARD

67-77 A game of high quality that you as a reviewer would have no reservation in recommending. Anything of this ilk would be awarded the SILVER award.

AMIGA SILVER AWARD

78-89 A brilliant title. Definitely worth buying and almost the definitive of its kind. This type of game would receive the GOLD award.

AMIGA GOLD AWARD

90-100 The best in its genre. This benchmark title receives the PLATINUM title.

AMIGA PLATINUM AWARD

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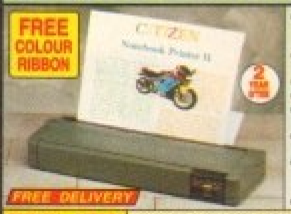

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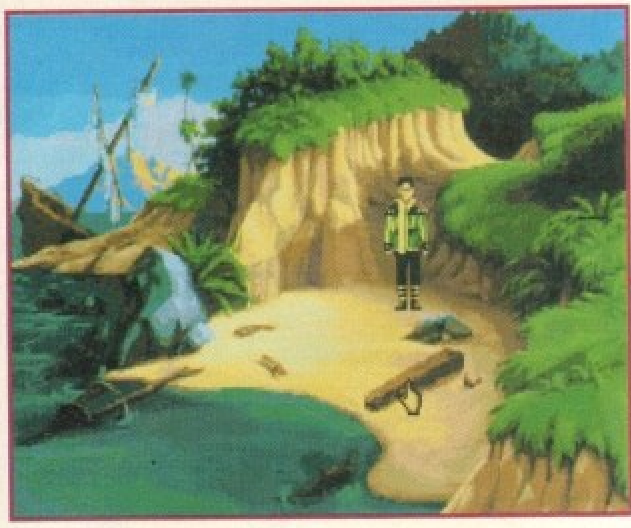
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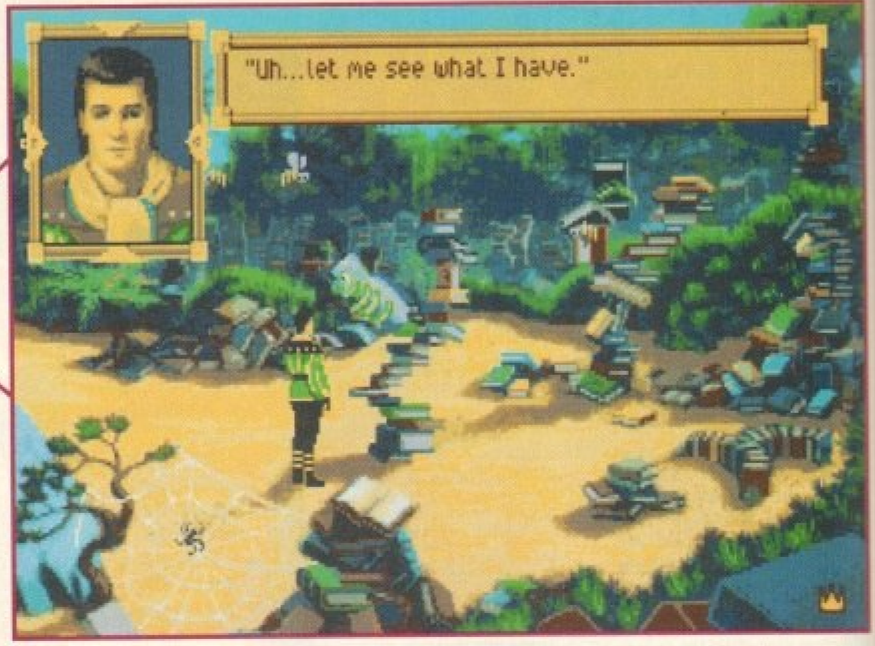
# beat the system

# King's

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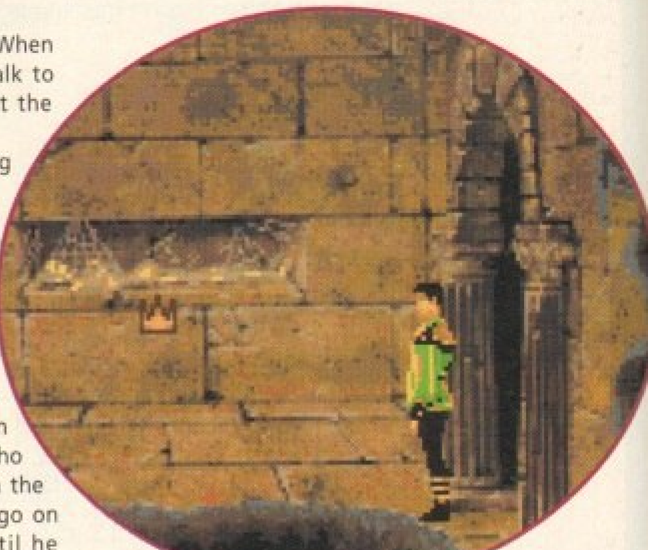

*At exclamation point you bump into a bookworm who has lost his dangling participle. Ouch, sounds painful!*

The start of your adventure and the first thing you have to do is pick up a ring. Your next job will be to move the plank. After you have moved the plank you will see a box, open it up and pick up the coin. Now, walk to the crossroads and from there walk right up to the castle.

At the castle you will meet a guard. Talk to him and show him the ring. You will now meet with Vizier. After this you will have to walk to the village and enter the book shop. When you are in the shop talk to the shop owner to get the ferry references.

Collect the boring book and then go to the love poem shelf and read a love poem. A page should fall to the ground and you can pick it up. Before leaving the shop, click on the spell book on the counter. Upon leaving the shop walk north to the village, look at the beauty in the garden and then go west. Ignore the boy who is swimming and go to the ferryman. Knock on the ferryman's door to talk to the ferryman then go on the ferry. Keep talking to the ferryman until he repeats himself.

When he does this take the rabbits foot and exit the ferry. Now walk back to the village and go to the book shop. Walk inside and talk to Jollo the clown. Show the ring to Jollo and then leave the shop.



*Alexander wanders around the catacombs looking for the beast. That geezer in the wall looks as though he's already met him. Gulp!*

Make your next stop at the pawn shop and pick up a mint. Talk to the shop keeper who will produce a map. Show the ring to the pawn shop owner and trade it for the map. Observe the next animation and then show your coin to the pawn shop owner. After showing your coin to the pawn shop owner, take the nightingale and leave.

## MAGIC MAP

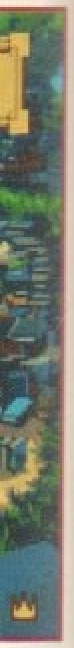
Once outside leave the village and return to see another animation. You will now find a bin. Get some invisible ink from the bin, then go to the beach. Use the magic map and from it select the Isle of the

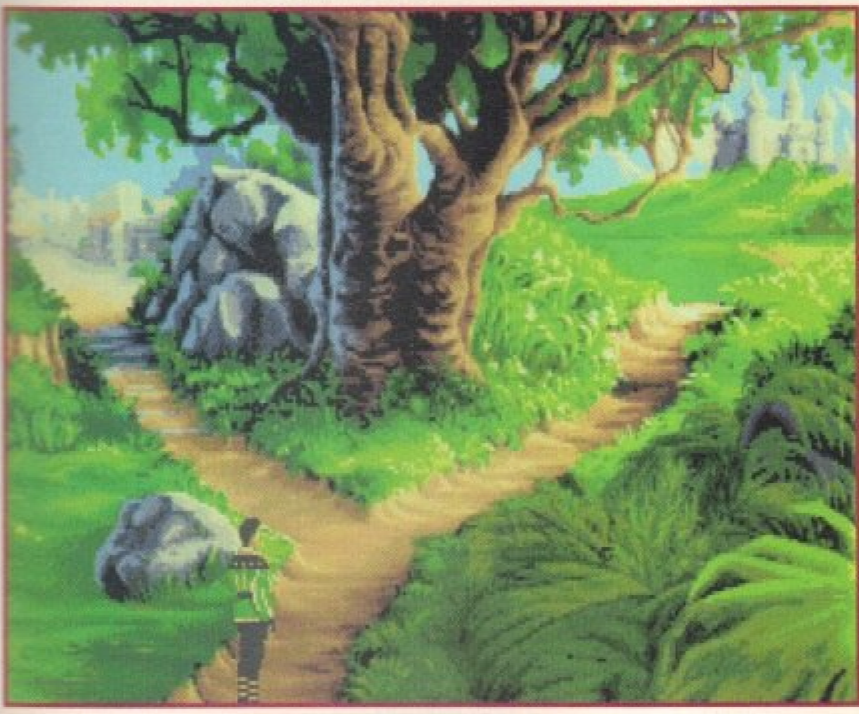


*In the swamp and things are starting to get very spooky indeed. Nothing to go on as yet, but you'll be back here later!*



*Pick up one of the iceberg lettuces because it'll come in very handy for later on in the adventure*

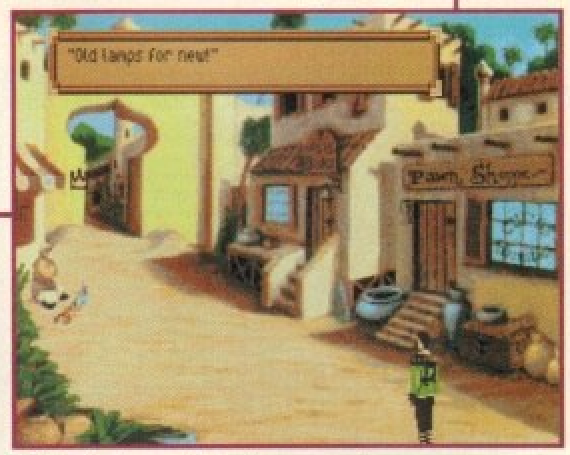




Use your wind-up nightingale on the real nightingale and you will find that the bird will take love poems to your Princess

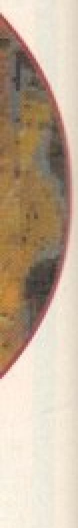


The guard-dogs at the palace won't let you in, so change direction and see if there is another way to enter




Talk to the lamp seller and you never know, you might get lucky and get a lamp with a genie inside!

# s Quest 6



Sacred Mountain.

On the mountain pick up a flower and a feather, then using the magic map once more select the Isle of Wonder.

On the Isle of Wonder you will meet up with a number of gnomes. You must use the flower on the smell gnome, the wind-up nightingale on the sound gnome, the mint on the taste gnome, the rabbits foot on the touch gnome and use the invisible ink on Prince Alexander in front of the see gnome.

Next you should get the sentence from the water. You will meet an oyster, whereby read the boring book to the oyster and when it opens its mouth take the pearl.

When you have done this head east to exclamation point. When you reach exclamation point try to take a pile of books and you will be asked to get a dangling particle for the exchange of the books.

Walk back to the beach, then north through the swamp to the garden and pick up an iceburg lettuce, before heading back to the beach. Use the magic map again and go to the Isle of Beast.

Once on the Isle of Beast walk north to the boiling pond. Use the iceburg lettuce to cool the pond where there should be a hunters lamp in a tree – collect it. Next you should head north ignoring the gardener on the way and you should find a brick – take it and walk back to the beach. This is where you meet the dangling particle.

Talk to the dangling particle and read it the sentence. Now use the map to go back to the Isle of Wonder. When you land on the beach walk to exclamation point again. Try to take some books and when the bookworm appears use the dangling particle on it in exchange for a rare book. Open the rare book in the inventory.

Click on the dangling thread to distract the spider and while the spider is distracted get the scrap of paper. When this is completed walk back to the beach and use the map to get back to the Isle of Crown.

From the beach, head for the crossroads. When you find a nightingale use the wind-up nightingale to befriend it. When you have done that, walk into the village and read the proclamation.

Then enter the pawn shop. Use the wind-up nightingale on the shopkeeper and then select a flute from the counter. Exchange the pearl to get the ring back and then exit.

Go into the book shop and talk to Jollo. Swap the rare book with the shopkeeper for the spell book. Open the spell book in the inventory for the ingredients, exit the shop and walk to the crossroads.

## INVENTORY

Use the ring on the nightingale and then pick up the ribbon. Click on the ribbon in the inventory to get a hair strand and then walk to the beach. Use the magic map to go to the Isle of Wonder. Once on the beach, go to the garden.

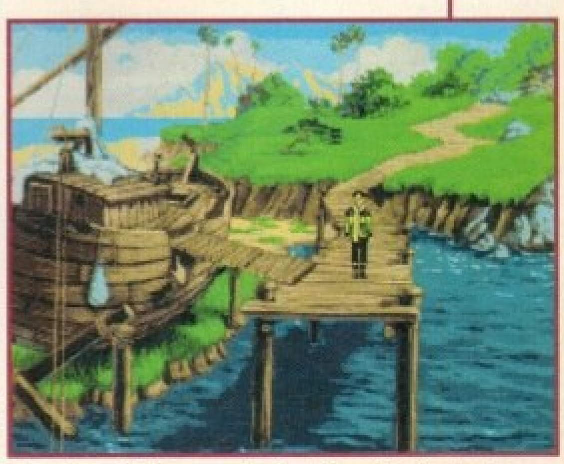
In the garden there is a teacup on the chair. Take it and also pick up the rotten tomato. There is a hole in a wall. Look at the hole and then click on it. Use the flute to make the wallflowers dance. While the flowers dance, click on the hole-in-the-wall.

Go through the gate into the chessboard land. Once in chessboard land, walk towards the chessboard guard and observe the queen. Get the red scarf, walk back to the swamp and use the teacup on the swamp.

Give the rotten tomato to the bump on a log. Use the teacup on the swamp-ooze, which can be found on the log. Walk to the beach and use the map to go back to the Isle of the Crown



The pawn shop is one of the most useful places you can visit for getting important objects



Go and see the ferryman, but watch out for the boy in the water. Don't dive in to join him or it'll be game over!

# GAMES

- G4 **MEGABALL** Breakout – very addictive
- G5 **STAR TREK I** (2 disks) Space (Not A1200)
- G13 **CASTLE OF DOOM** Adventure
- G15 **GOLDEN FLEECE** Text only adventure
- G22 **CARD GAMES** Harp, Plait, Queens etc
- G34 **RETURN TO EARTH** Elite type
- G35 **LLAMATRON** 512K & 1Mb Shoot 'em up
- G41 **ESCAPE FROM JOVI** Space Arcade
- G44 **BATTLEFORCE** Fantasy roll playing game
- G45 **DRAGON CAVE** Dungeon Master type
- G52 **GREYSLAYER** Arcade adventure
- G54 **STAR TREK 2** (3 disks/Not 1200
- G56 **FRUIT MACHINE** * Excellent
- G57 **MECHFORCE** (2 Disks) RPG
- G62 **AIR ACE II** World War 2 S.E.U.
- G67 **TREASURE HUNT** (6-8 yrs)
- G68 **CHEAT LIST GAMES V1.0**
- G72 **TREK-73** Space text adv
- G73 **ZEUS – THE GAME** Puzz tiles
- G74 **DUNGEON DELVER** (2 Disks) Mazes
- G75 **PICK UP A PUZZLE** * (2 Disks) Jigsaws
- G76 **CHAINSAW DEATH** * Futuristic maze type
- G77 **CAN YOU PICTURE IT** * (2 Disks) Jigsaw
- G79 **BALLOONACY** * Bomb the skyscrapers
- G82 **BLACKJACK** Card game
- G88 **AMIGAMAN GAMES** 10 games
- G92 **STAR TREK THE NEXT GENERATION** (Not A1200)
- G94 **HACK** Text adv
- G95 **DRAGON TILES** Great tiles game
- G96 **BOARD GAMES**
- G97 **ATIK ATAK** C64 game
- G99 **BART SIMPSON** Scrolling S.E.U.
- G125 **RAMIFY** Pairing
- G126 **RUSH HOUR** Frogger – Get across the road
- G130 **WIZARD WORLD** S.E.U. Platform
- G131 **WORLD OF FOOLS** Shoot em up
- G133 **CARD SHARP** 5 card games
- G134 **TOTAL WAR** Risk type
- G136 **SKYFLYER** WWII S.E.U.
- G137 **PUGGLES** Q'bert brill
- G138 **SQUATS REVENGE** Wolf clone
- G139 **PAIR IT** Shapes
- G140 **GAMES COMPILATION I** 6 games
- G141 **ATLANTIS I** Strategy
- G142 **NAPOLEONIC WAR SIMULATION** Strategy
- G143 **MISSION RAID PART II** S.E.U.
- G144 **SNAKES & LADDERS** Good
- G145 **GAMES GALORE VOL 7** For the young
- G146 **AIR WARRIOR** Flight simulation
- G152 **DUNGEONS OF NADROJ** Hacktype
- G153 **QUICK & SILVER** Platform. Excellent
- G154 **MASTER OF THE TOWN** Shoot the sign posts
- G156 **ETHOS** Text adv + pics
- G157 **BATTLE CARS** 3D cars S.E.U.
- G158 **CHALLENGER** Quiz - 5 player
- G182 **CATACOMB** Graphic adv – very well done
- G183 **KINGDOM AT WAR** War games
- G184 **SMASH TV RIPOFF** S.E.U. Futuristic
- G185 **DOODY** Mario type platform
- G186 **PICK OUT** Pair It. V. good
- G187 **NU-SHOOT EM UP** Space
- G189 **STRIKE BALL** Baseball. Brill!
- G192 **CRAZY SUE** Platform. 1st rate
- G193 **HENRY IN PANIC** Manic Miner type
- G194 **CONCENTRATION V3.3** Pair it type
- G195 **DESTINATION MOONBASE** Thrust
- G196 **ESCAPE FROM JOVI III** Caves
- G197 **NO MANS LAND** War S.E.U.
- G198 **DOMINOES** V. Good
- G200 **MIDNIGHT THIEF GAME** Adv
- G204 **GRUB GRABBER II** Help Elvin! Avoid gremlin
- G205 **SWORD OF WORLOCK** 3 disk Adv
- G206 **A NIGHT AT THE TOP** Terrorist adv
- G208 **QUADRIX** Puzz. Excellent
- G209 **YUM YUM** * Pacman
- G210 **REVENGE MUTANT CAMELS** S.E.U.
- G211 **BATTLEMENTS** Hunchback platform
- G212 **LEMMINGOIDS** Blast them!
- G218 **KARATE WORM** Platform-cute
- G219 **SNAKE IN THE GRASS** Platform – neat
- G221 **WIZARDS DOMAIN** Graphic adv
- G222 **PIXIE KINGDOM** (2 disks)
- G223 **ARCADIA** Breakout – very popular
- G224 **PORK A PORK** Stop the foxes
- G225 **MR BRICK** – Mario type
- G226 **RAID III** S.E.U. – wicked
- G227 **SERENE III**
- G228 **WOTSITSNAME** Quiz
- G229 **TETREN** – tetris
- G230 **NUMPTY & THE ALIEN INVADERS**
- G233 **OMEGA RACE** S.E.U. Great
- G234 **MENTAL IMAGES DISK 2** 3 games
- G262 **MR & MRS** Young platform – very good
- G263 **TANX** Great 98%
- G264 **DEFENDA** Arcade 95% Brilliant conversion
- G265 **GRAND PRIX SIMULATOR** Mega
- G266 **NUMBER FUMBLER** Number puzzle
- G267 **LEMMINGOIDS** Blast away
- G268 **GROWTH**
- G270 **PROJECT 1**
- G271 **LAZER ZONE**
- G272 **LEMMINGS PACK**
- G273 **THE MAZE GAME**
- G275 **APIDYA**
- G276 **SHOOT OUT**
- G277 **SUPER SKODA CHALLENGE**
- G278 **COMPUTER CONFLICT 2**
- G279 **ANTEP & SLOT CARS GAME** RPG
- G280 **TRICKY & THE TURN GAME**
- G283 **CARD GAMES 2**
- G285 **MIND GAMES 21**
- G286 **HYPER TEXT CHEATS**
- G287 **TECHNOBAN** Puzzle game
- G289 **THE BEAST** Mission to kill
- G290 **NADILOT RUN** Cat & dog chase
- G291 **OUCH** Clobber those moles
- G292 **ABSOLUTE ADV VOL ONE**
- G293 **CHAOS STRIKES BACK** Maps etc
- G294 **GAME TAMER v4.59** Latest
- G302 **AMOS CRICKET** Good cricket game
- G303 **ARAZNAX** 40 levels
- G304 **HELL ZONE** Elite
- G305 **FATAL MISSION** Good shoot 'em up
- G307 **CROSSMAZE/CRYPTO KING** Words
- G308 **INTERLOCK (AMOS)** 25 levels
- G309 **TANK ATTACK & MOUTHMAN**
- G311 **THRALLBOUND** Viking Adv Text
- G312 **BOUNCE AND BLAST** Platform
- G313 **SOCCER CARDS** Run the club
- G314 **CYBERNETIX** Fast action
- G315 **STAR MIX 2** 3 games
- G316 **FLAG CATCHER** Squares puzz
- G317 **OMEGA** Adv Moria type
- G318 **TOP SECRET** Excellent graphics platform
- G319 **MADONNA** Jigsaw
- G320 **ROBOCOP GOES TO IRAQ** seu
- G321 **BACK TO THE FUTURE III** Funny
- G322 **45 CHEATS** Codes etc
- G323 **TOMCAT** F15 shoot 'em up
- G324 **SUPER QUIZ**
- G325 **POWER PONG** Boing
- G326 **MAHJONG** Tiles
- G327 **MESTER** Cards
- G328 **STARFLEET** Shoot 'em up
- G329 **EXCALIBER** Shoot 'em up
- G330 **IMPERIUM ROMANIUM** Battle
- G331 **SQUAMBLE** Very Spacey!!
- G332 **JETMAN** Good shoot em up
- G333 **MECHFORCE v 3.71** Latest update
- G334 **PROPERTY MARKET GAME** Strategy
- G335 **ROLL ON & LAMER** Pushing
- G336 **HACKLITE v 1.0** Moria & Hack
- G338 **DIE FILTH** (2 disks) Brill like Swiv
- G339 **ULTIMATE HINT KIT v1.0**
- G340 **THE ACE CHEATS DISK 2** Lots
- G341 **BATTLE OF BRITAIN** Strategy
- G342 **THE SECRET OF MONKEY ISLAND** (Demo)
- G344 **ESCAPE II** Creating games
- G345 **QUIZMASTER v 1.0** Test your knowledge
- G346 **NEBULA** Shoot-em-up fast action!
- G347 **ESCAPE** Into space!
- G348 **RUMMY** Excellent card game
- G349 **SPACE RESCUE** Super shoot 'em up
- G350 **INVADERS MARK II** Space invaders
- G371 **ERIC THE WARRIOR** Sim to Gauntlet
- G372 **KLAKTRIS** Tris type game
- G373 **CLI-TRIS** Latest TRIS
- G374 **DELUXE PACMAN**
- G375 **GALAGA 92** Shoot-em-up
- G376 **LIBERATOR GAME** Shoot-em-up
- G377 **ACK-ACK**
- G378 **CRAZY SUE 2** Latest platform
- G380 **LAST REFUGE** Invaders
- G381 **ZINGGER GAME** Karate game
- G385 **MORIA v5.4** Latest
- G386 **FRUIT MACHINE II** AMOS good
- G387 **OBLIVION** Defenda clone
- G388 **BOMB JACKY** Platform
- G390 **OTHELLO** Board game classic
- G391 **SOLITAIRE SAMPLER** Cards
- G392 **WILLY IN THE CASTLE** Excellent platform
- G393 **FRUIT SALAD** Platform. Reviewed in Format
- G394 **MARIO IN WONDERLAND** Brill clone – Mega!
- G396 **GIDDY** Great new platform game
- G398 **ATOMS** Weird!
- G399 **VECTA STORM** Brill new Tempest clone
- G400 **DIGITAL TETRIS**
- G402 **TETRIS PRO**
- G403 **SUPER PACMAN 92**
- G404 **BRIDGE**
- G405 **18th HOLE GOLF** (2 disks)
- G406 **SLIDE SQUARES** Puzzle
- G407 **THEY CAME FROM OUTER SPACE** Shoot em up
- G408 **SON OF BLAGGER** Excellent platform
- G409 **BRAINBOW** Addictive puzzle
- G410 **MYSTERY 2144 AD** Futuristic Murder adv
- G411 **GUSH** Fab pipeline clone
- G412 **MEXICAN MASSACRE** Arcade action
- G413 **100 MEGA GAMES** (7 disks)
- G414 **BOX** Adventure game
- G415 **SLAMBALL** Future Management sim.
- G416 **MAYHEM2** Multi player manic maze
- G417 **MUGSIE** Money making gangster adventure
- G418 **ROULETTE + PUNTO 2** Good game (not 1.3)
- G419 **BLITZ GAMES** Worm, buzzbar, speed etc
- G420 **SKID MARKS** Amazing driving game
- G421 **ZOMBIE, APPOCOLIPS AND DEFENDER 2** Brill
- G422 **BILLY BURGLAR** Just try to escape.
- G423 **OLYMPIAD** (Lemmings) (2 disks)
- G424 **CAVE FLIGHT** Dodge the obstacles.
- G425 **SERIOUS BACKGAMMON** Demo
- G426 **AIRPORT**
- G427 **EXIT-13** Puzzle
- G429 **BOW & ARROW**
- G430 **BLOAD RUNNER**
- G431 **POPEYE** C64 classic
- G432 **CASTLE NORRIS**
- G433 **THE RIGHT WAY** Lemmings
- G434 **PATIENCE** Cards
- G435 **PREMIERE PICKS** Football
- G436 **BOB N' FLOP**
- G437 **ROAD TO HELL** Racing brill!
- G438 **FIGHTING WARRIORS** Street Fighter 2 clone
- G439 **LEMMINGS 2** HD install
- G440 **NAPOLEONIC WARFARE** (2 Disks) Strategy
- G441 **TEXAS CHAINSAW MASSACRE**
- G443 **SCRABBLE**
- G444 **SMURF HUNT**
- G446 **THRUST DUEL** Gravity control
- G447 **EXORCISM** (2 Disks) Adv. & graphics
- G448 **CONQUEST & DOMINATION** Strategy war game
- G450 **DONKEY KONG** Platform
- G451 **OPERATION METEOR** 3D Graphics
- G452 **MR MEN OLYMPICS** (2 Disks)
- G453 **SUITCASE** (2 Disks) Adventure
- G454 **ESCAPE FROM DOOM** RPG type
- G455 **HIGH OCTANE** Overhead driving
- G456 **FATAL MISSION 2** Shoot em up
- G457 **KUNG FU CHARLIE** Platform beat em up
- G458 **GAMES GALORE 13**
- G459 **MENTAL IMAGES Vol 2**
- G460 **IRON CLADS** (2 disks) Naval battle Not 1200
- G461 **INTREPID** Rescue Dame form Evil
- G462 **QUIZ MASTER**
- G463 **QUIZ CHALLENGE**
- G464 **EYE OF BEHOLDER II** Cheats
- G465 **CHEATS** Many solutions
- G466 **PASSWORD PARADISE**
- G467 **MEGACHEATS v3.0**
- G468 **ELEVATION 2** Platform
- G469 **SCORCHED TANKS** Battle
- G470 **AMOS LOADSAMONEY** Fruit machine
- G471 **STAR TREKING TRIVIA** (2 disks)
- G472 **SUPER TOMCAT** Shoot 'em up
- G475 **NOSTROMO CHEATS & SOLVES**
- G476 **ORC ATTACK**
- G477 **TANK HUNTER**
- G478 **RAID 4**
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- G480 **MEGABALL 3**
- G481 **ROACH MOTEL** - Kill the roaches! Platform
- G482 **ASOKOBAN v1.1**
- G483 **BILLIARD GAMES** 3 games. Shareware
- G484 **BLOODBALL** Crillon type
- G485 **CRITTUR CAULDRON** Life simulation
- G486 **DR WHO**
- G487 **DUNE 3** (2 disks) Worm race game
- G488 **GALAXY MAPPER**
- G489 **JB POKER** Cards
- G490 **MF HOD** use with Mechforce
- G491 **MR BROWNSTONE** B/dash clone
- G492 **NEW WORLD** (2 disks)
- G493 **NO MANS LAND** 2 players
- G494 **PARADROID** action like C64
- G495 **PROKER** Card variation
- G496 **REUDA** Wheel of fortune
- G497 **SNACKMAN** Pacman clone
- G498 **ANGBAND** (3 disks) Moria type
- G499 **BLEED 1** Cool adventure
- G500 **BLEED 2** Next part
- G501 **STARBASE 13** Monkey Island clone
- G502 **TITANIC CHEATS**
- G503 **ENTITY** Zap the nasties
- G504 **HOTBLOX** 2 player Tetris
- G505 **NUMTRIS** Number Tetris
- G506 **GAME TAMER V4.59** Latest cheats
- G507 **JELLYQUEST** 3D puzzle game
- G508 **ESCAPE FROM DOOM** RPG adv.
- G509 **MICROMARKET v1.2** Buy and sell shares
- G510 **ZYRAD** Overhead collecting game

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- BD 40 - RUPPLE MINES
- BD 41 - EASY RUPPLE MINES
- BD 42 - RUPPLE MINES EDITOR
- BD 43 - WATER MINES
- BD 44 - ADVENTURES OF MR B - Part 2
- BD 45 - EAT MINES 1
- BD 46 - EAT MINES 2
- BD 47 - EAT MINES 3
- BD 48 - EAT MINES 10
- BD 49 - NO ONE MINES 1
- BD 50 - NO ONE MINES 2
- BD 51 - NO ONE MINES 3
- BD 52 - NO ONE MINES 5
- BD 53 - NO ONE MINES 6
- BD 54 - NO ONE MINES 7
- BD 55 - NO ONE MINES 8
- BD 56 - NO ONE MINES 9
- BD 57 - NO ONE MINES 10
- BD 58 - SPUD MINES 3
- BD 59 - ENEMY MINES 1.3 only
- BD 60 - BOBBYDASH
- BD 61 - DENMINE 1
- BD 62 - LADYBIRD MINE - KIDS
- BD 63 - INTO THE FUTURE FIELDS
- BD 64 - INTO THE FRUSTY FIELDS
- BD 65 - INTO THE COLD CAVES
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- BD 67 - FUN MINE 1 1.3 only
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- BD 86 - DENMINE 5
- BD 87 - DENMINE 6
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- BD 89 - EMERALD EATER 2 1.3 only
- BD 90 - EMERALD MINE 5
- BD 91 - EMERALD MINE 6
- BD 92 - EMERALD MINE 7
- BD 93 - EMERALD MINE 8
- BD 94 - EMERALD MINE 11
- BD 95 - EMERALD MINE 16
- BD 96 - EMERALD MINE 17
- BD 97 - NO ONE MINE 4
- BD 98 - NO ONE MINE 12
- BD 99 - NO ONE MINE 13
- BD 100 - NO ONE MINE 14
- BD 101 - NO ONE MINE 15
- BD 102 - NO ONE MINE 16
- BD 103 - SUPER EMERALD MINE LAZER
- BD 104 - ADVENTURE OF MR B - Part 1
- BD 105 - RUNNER MINE 3
- BD 106 - RUNNER MINE 4
- BD 107 - BOND MINE 2
- BD 108 - BOND MINE 3
- BD 109 - BOND MINE 4
- BD 110 - BOND MINE 5
- BD 111 - BOND MINE 7 5
- BD 112 - BOND MINE 8
- BD 113 - BOND MINE 9
- BD 114 - BOND MINE 11
- BD 115 - RABOULDIX
- BD 116 - RUPPLE MINE 5
- BD 117 - RUPPLE MINE 3
- BD 118 - RUPPLE MINE 2
- BD 119 - RUPPLE MINE 4
- BD 120 - BLUE DIAMONDS 4
- BD 121 - INTO THE FRUSTY MINES
- BD 122 - SNELMINE 1
- BD 123 - OZ MINE 1
- BD 124 - OZ MINE 2
- BD 125 - OZ MINE 3
- BD 126 - BONDMINE 10
- BD 127 - DANMARK 1
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- BD 132 - EMERALD CRUNCHER 1
- BD 133 - JUNIOR ICE MINE 2
- BD 134 - RECYCLED MINES III
- BD 135 - EMERALD FREAK
- BD 136 - FREAK MINE 1
- BD 137 - FREAK MINE 2
- BD 138 - EXCEPTION 1
- BD 139 - JUNIOR 1
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- BD 141 - EMERALD FREAK II
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- BD 144 - BUGMINE 2
- BD 145 - BUGMINE 3
- BD 146 - VENOM 1
- BD 147 - VENOM 2
- BD 148 - INTO THE HISTORY HOLES
- BD 149 - NORTHLIGHT MINE 1
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**BOULDERDASH PACKS:**
Any 10 = £12.50 Any 20 = £20.00
Any 50 = £47.50 Or Singly at PD Prices

# ASSASSINS COMPILATION GAMES

***Most now work on A500/A500+/A600/A1200***

- ASI 21 Zeus, Tettrix, Battlements & Dragontiles
- ASI 23 Quick Money, BIP, Interferon, Arcadia
- ASI 24 Revenge of Camels, Dux Croak, 3dmaze etc!
- ASI 29 DOG, Rome, Nova, B-Bal, Atax, Quadrix
- ASI 30 Bounce & Blast, Total Fire Tank Attack!
- ASI 37 Klaktris, Ghostship, Paccer etc!
- ASI 38 One on One, Baldy, Skyflyer 2, Transplant!
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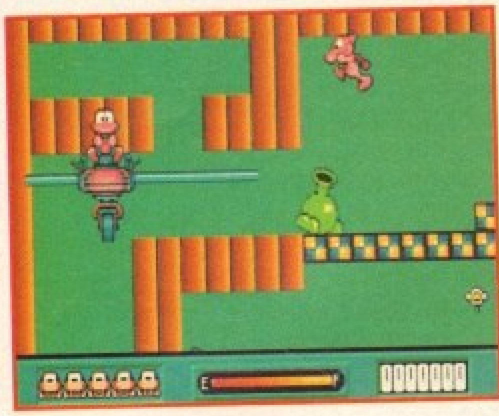
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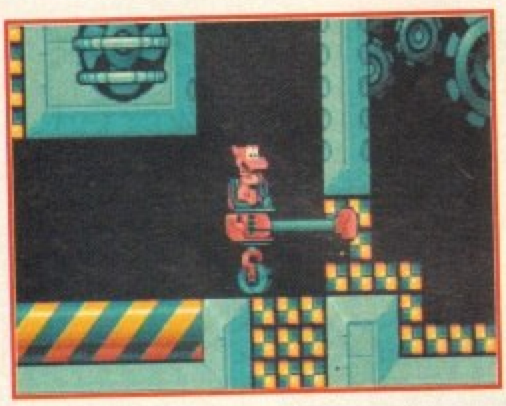
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*Millennium's new cutesy platform star must save the dinosaurs by collecting the spotty eggs, remembering to deposit them in his superb Pinkie pod for safety.*

## INTRODUCTION

In the past, some of the world's best game characters like Zool, Chuck Rock, Bub & Bob, and James Pond have appeared on the Amiga, but where are today's stars?

Zool has gone back to the Nth Dimension, Chuck has rocked off, Bub & Bob are somewhere over the rainbow and James Pond has flipped out!

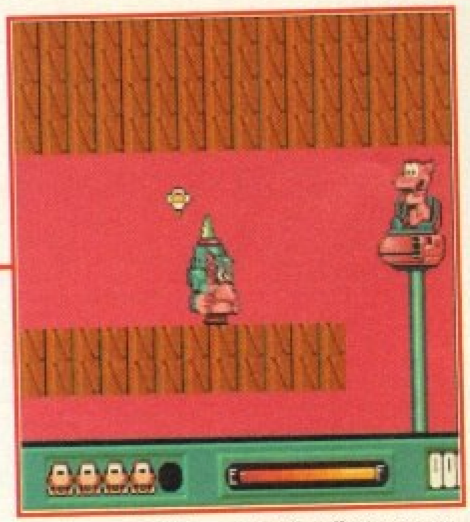
The lack of decent characters is slightly worrying, but I think a solution to rectify this problem has been found. Millennium, a company already successful with the James Pond series of adventures, have invented a brand new platform character and Pinkie is his name.

With his home base set on the Planet Purple, Pinkie is small in stature, owns a big heart, a bouncy walk, a huge appetite and perhaps the cheesiest grin you've ever seen in your life.

The actual game is a blend of hot and frenzied platform action, plus a good healthy dose of puzzles have been chucked in there for good measure. Millennium are hoping that Pinkie will do the business for them and hopefully become as big as his platform contemporaries.

# Pinkie

**Yet another cutesy platformer, but is this one a little bit different than the rest? Jonathan Maddock is tickled pink as he enters the surreal egg-collecting world of Millennium's latest platform offering**



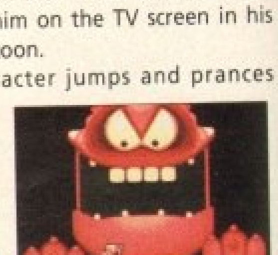
*On his quest Pinkie must try to collect as many flowers as possible while avoiding his enemies*

## GRAPHICS

The visuals in Millennium's platformer are superb and Pinkie really does look like a cartoon. This is partly down to the traditional animation pastel colour palette which really brings all the game characters to life.

Not surprisingly, Millennium have got plans to take their pink star from the monitor screen and place him on the TV screen in his own animated cartoon.

The main character jumps and prances around the screen and is very well animated, plus there are so many nice animated touches that it's obvious a lot of time and trouble has been spent on creating Pinkie.



The backgrounds differ from level to level and range from snowy wastes to alien worlds (complete with pulsating backdrops). The graphics are so good that Pinkie literally looks like a breath of fresh air in the otherwise dull and stale world of platformers.

**85%**

## FLASHBACK

There have been so many platformers similar to Pinkie that I could possibly list them all.

Titles like Zool 2 and Bubba 'n' Stix stand out in the mind because they've only just come and gone, but if I had to compare Pinkie to anything, I would have to delve into Millennium's back catalogue. The James Pond series of games have delighted gamers the world over with their brilliant mix of platform action and teasing set of puzzles. The best out of the series was, undoubtedly the last one Millennium released.

James Pond 3 had better quality graphics than its predecessors and overall was a much more rounded and complete game, mainly due to it's unmatched levels of gameplay and addiction

## STORYLINE

Pinkie makes plenty of happy jaunts to other planets in the solar system with the intent of exploring and meeting other beings. Pinkie's first mission in this, his debut game, is to save the alien dinosaurs from extinction.

This is done by collecting the eggs and keeping them safe in his Pinkie pod. The eggs are yellow with blue spots and are extremely fragile. When the eggs hatch a fully formed baby dinosaur pops out. The eggs have been placed, unfortunately for Pinkie, in the most precarious of places throughout the galaxy.

If the hero of the game drops an egg it is likely to shatter. Once this happens, the baby dinosaur immediately extends its legs out until they reach the floor and then runs away. These highly mobile eggs cause Pinkie all manner of problems. If Pinkie does manage to collect all the eggs and save the dinosaur race, he will be handsomely rewarded by the King of the Pinkies.

## SOUND

The music in Pinkie is pure unadulterated pop and so it should be. The games score will go down in the history books as just another cheesy platform tune, but Millennium have taken the concept of game music a step further.

The Cambridge-based company approached Station 2 Station, a music marketing company responsible for getting Mr Blobby to number two in the charts last Christmas and for working with top pop stars like Right Said Fred, to see whether licensing Pinkie to music would be a good idea.

The brief was not to produce a single from the game music, instead Millennium asked Station 2 Station to produce an original interpretation of a game "score".

Station 2 Station finished up with a 30-track single entitled "Play-It" and it features the vocal talents of Kelly Smith AKA Little Sister. CD32 owners will have the pleasure of having all 30 mixes of the same single and you, as the listener, will be able to make up your own favourite mix.

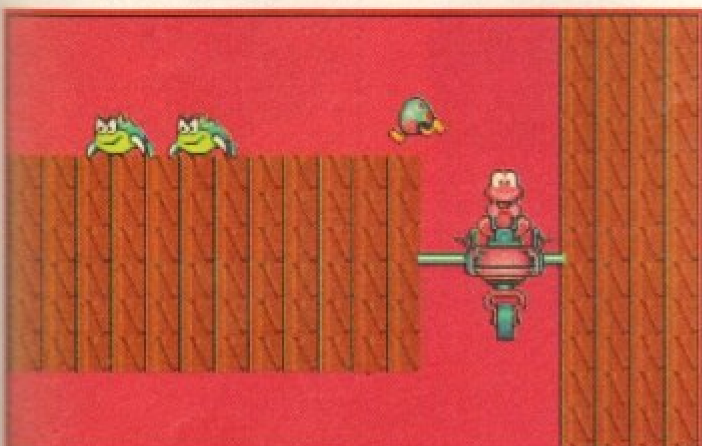
A1200 owners will just have to buy the single on its own when it hits the charts!

The sound effects, before I forget, are just standard noises and aren't worth shouting about, but they do the job adequately enough.

**80%**

- Publisher: Millennium
- Developer: Data Design
- Disks: 2
- Price: £25.99
- Genre: Cutesy platformer
- Hard disk install: No
- Control system: Joystick
- Supports: A500/A600/A1200/A4000
- Recommended: 68000 upwards



Pinkie's pod has more gadgets than the Batmobile and can be used to reach parts of the game that Pinkie wouldn't normally be able to reach!



Hopping off his pod, Pinkie finds one of the highly important dinosaurs eggs

## OPINION

**83%**

Pinkie is a cracking little platformer. It looks beautiful with its pastel coloured graphics, it has a nice and cheesy poptastic soundtrack and even the gameplay differs from its competitors as it's heavily puzzle-based. The animation of the characters, including the hero, is very accomplished and well presented. The end-of-level guardians are especially worth checking out, due to the sheer gargantuan size of them.

Pinkie, as a concept, isn't anything different and doesn't contain any new surprises, but as a game on its own works remarkably well. I don't think I've seen a platformer cuter than this one and I imagine Pinkie, as a character, will be a huge success. The game is obviously going to appeal to the 11-16 age group, mainly because that's exactly who the game was designed for. Older gamers might want to take a look, but may prefer something with a little more substance.

Pinkie is a harmless little platformer that won't hurt anybody.

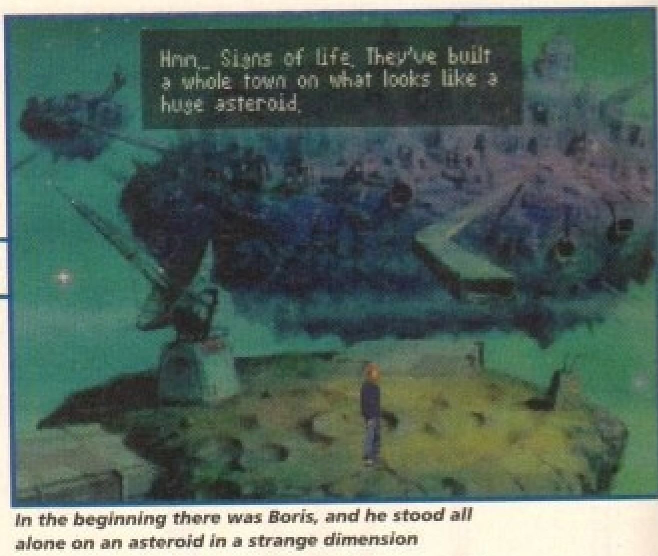
## INTRODUCTION

In the past, many companies have attempted to create involving and stylish graphic adventures, with varying degrees of success. These days it takes something a little bit special to make heads turn, but Derby-based Core Design have an impressive track record with games such as Chuck Rock and Heimdall proving especially successful.

Core are confident that Universe will make a major impact on an already crowded marketplace.

Innovative graphic and sound systems have been developed, but the game aims to be more than just a pretty face. There are also a couple of arcade sequences, despite the fact that in the past otherwise excellent games like Operation Stealth have been spoiled by over-tricky arcade sections.

However, the emphasis has clearly been on creating a challenging and atmospheric adventure that can be easily controlled via an uncomplicated system of user-friendly icons.




*In the beginning there was Boris, and he stood all alone on an asteroid in a strange dimension*

# Universe

**Much was expected of this graphical adventure from the creators of Curse of Enchantia. Dave Cusick finds out if it lives up to its billing**




## STORYLINE

Boris is just a normal kid living in a typical suburban neighbourhood. His dad probably works for a merchant banking firm in the town centre, and his mum does part time work at a local estate agents.

Boris has a sister called Jenny, who is about five years younger than him and likes Neighbours, Just Seventeen and Take That.

Boris is quite keen on computing, and he's just invested in a brand spanking new 35-bit Excellence Engine which knocks the socks off his best mate's 986PC XDAT VHS thingy.

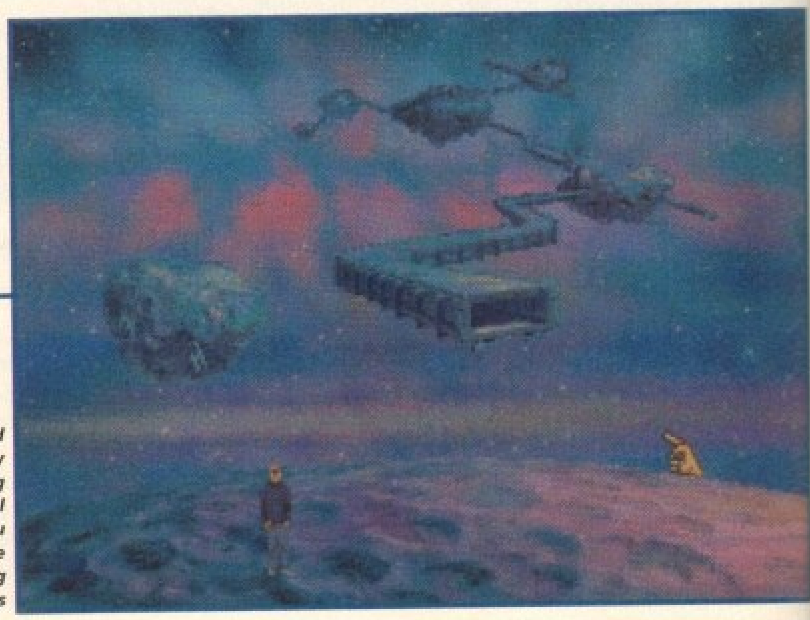
One winter's day, Boris is happily tinkering away in his bedroom when his mother, concerned that her beloved son is devoting too much time to an expensive piece of silicon and plastic, decides to send him on an errand – taking some mail to his Uncle George's house.

Boris grudgingly toddles his way through the centre of Ashby-de-la-Zouch on his bike, despite the recent snowfall, dodging Christmas shoppers wherever possible and colliding with them wherever not.

Along the way he ponders some fundamental questions of life, such as "What's in the envelope?", "Why does dropped toast always land buttered side down?" and "Who created Eamon Holmes?" Eventually, having answered two of these questions, he reaches Uncle George's house.

Uncle George is slightly wacky and eccentric, and among all manner of junk in his house, Boris finds a bizarre machine. Foolishly, he begins messing and promptly gets zapped into another dimension.

Some might say it serves him right, but regardless of whether it does or not it is your task to return Boris to his home. Having the opportunity to save the universe along the way is really an added bonus.



*A spinning asteroid passes silently by before shooting off into the eternal night, leaving you gaping at the outstanding graphics*

## GRAPHICS

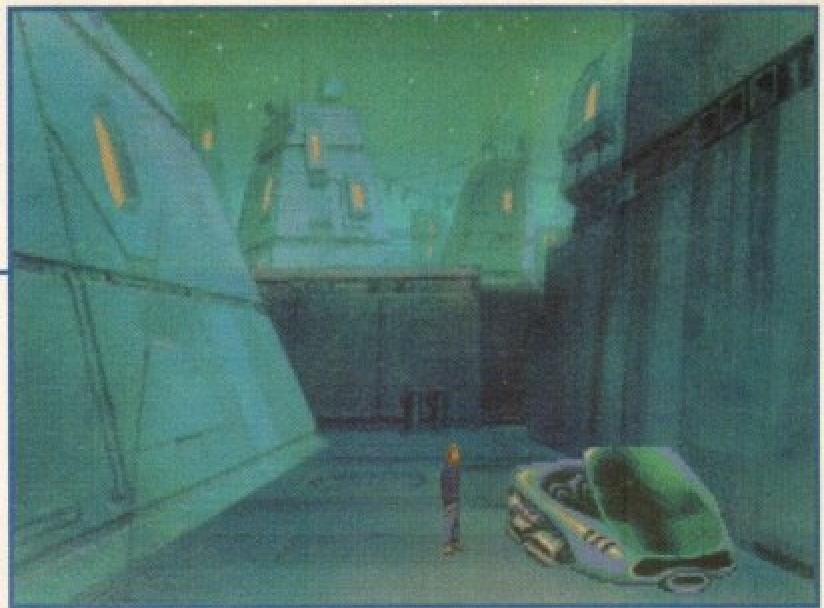
It's hard not to be impressed by the beautiful moody backdrops which were lovingly crafted by top-quality artists and then scanned into the computer.

There is some very effective use of colour and in places the scenery is nothing short of spectacular. Take a look at the screenshots and you'll appreciate just how stunning the effect can be.

Core says that Universe features a revolutionary new graphics system which allows up to 256 colours on screen, even on an A500. The desire to see new locations in all their graphical splendour is probably one of the reasons that Universe holds the attention so well.

Our hero Boris has quite a range of moves available to him, and the animation throughout is extremely lifelike and smooth. He shrinks as he moves further away from the front of the screen, but loses little detail in doing so.

**91%**



*I wouldn't mind a vehicle like that one, except that the insurance premiums could be worryingly high*




*The intelligently designed icon panel means Universe is easy to get into but strangely addictive*



*A perplexed Boris gazes longingly up at the light spilling from an out-of-reach window*

Publisher: Core Design
Developer: In-house
Disks: 5
Price: £34.95
Genre: Adventure
Hard Disk Install: No
Control System: Mouse
Supports: A500/A600/A1200/A4000
Recommended: 68000 upwards

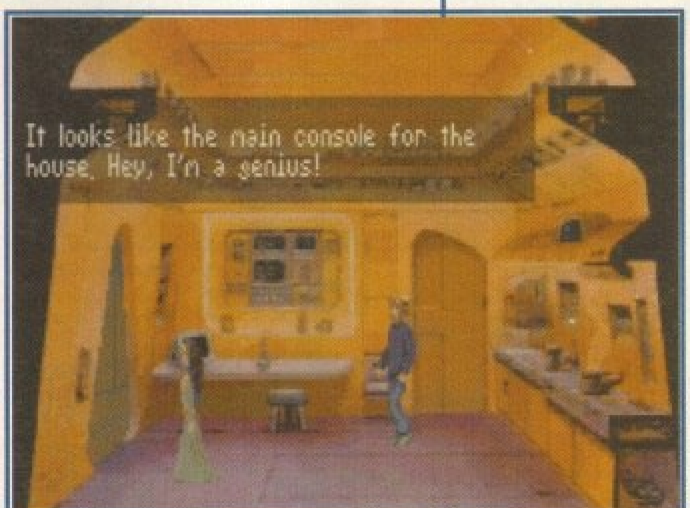
## FLASHBACK

The game which really started the trend for point-and-click adventures was the ageing Monkey Island, but to be honest I reckon Universe has a more effective control system and is streets ahead in terms of presentation.

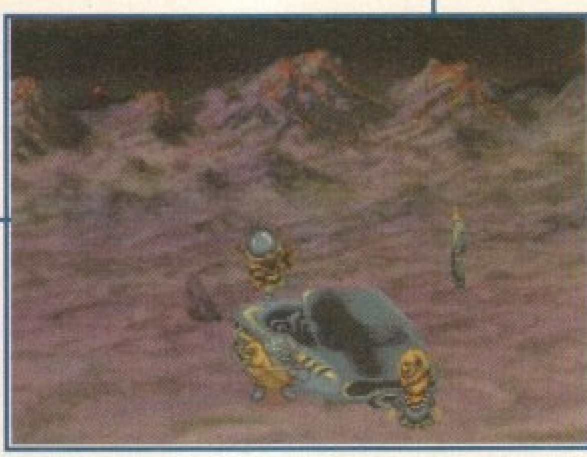
Monkey Island 2 was a great game but some of the puzzles could be a little strange and the game was supplied on a huge number of disks which meant plenty of swapping.

A fairer comparison might be Beneath A Steel Sky, a far more recent release with a similar science-fiction setting. In this you play Robert Foster, who finds himself in Union City. You must discover why you are there and what you must do now that you are.

It features a unique Virtual Theatre system developed by programmers Revolution Software, meaning that other people in the game go about their day-to-day business normally, so there is a feeling that you are part of a real living world.



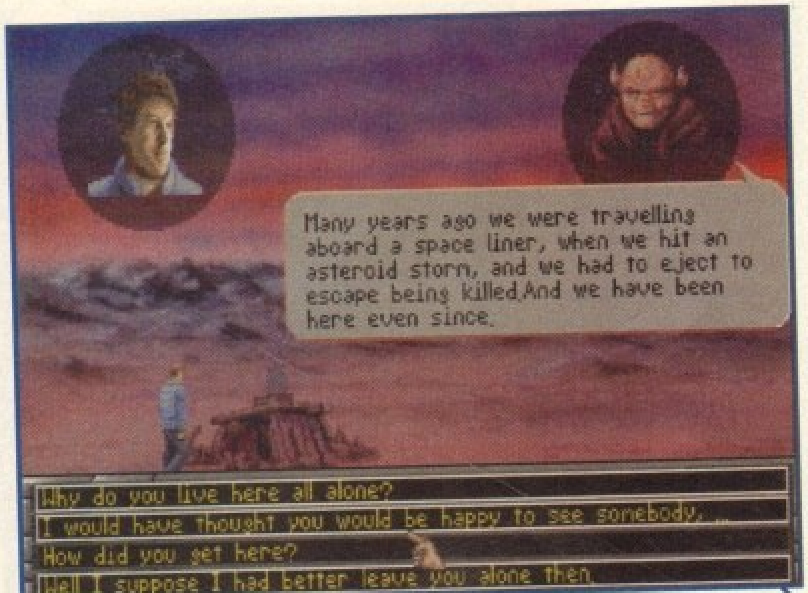

*This luxurious kitchen proves to be something of a deathtrap unless you can make a quick escape*



*Blimey, you can't leave a car anywhere these days without a band of hooligans appearing on the scene*



*Hang on a minute, wasn't he in "The Never Ending Story"?*



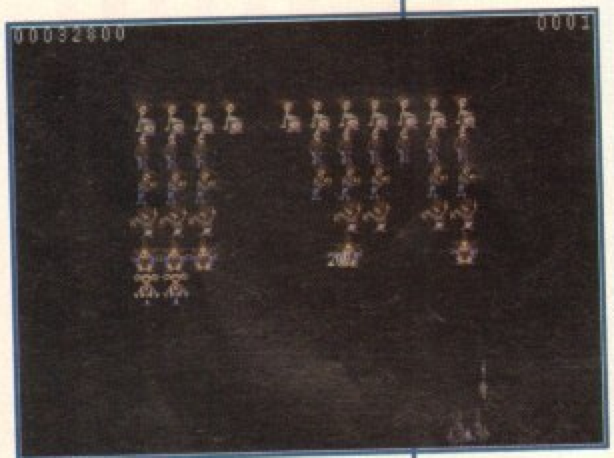

*A space hermit reveals all via the simple conversation system*



*Welcome to Wheelworld, which appears to be to Universe what Mos Eisley was to Star Wars*



*Is this Wheelworld, or a seedier part of Stockport on a Saturday night?*




*A golden oldie springs up, making a pleasant change from point-and-click frolics*

## ADDITIONAL INFO

Our universe is thought to be somewhere between 10 and 20 billion years old. At present the most distant detected galaxies are thought to be around 10 billion light years away, but scientists believe that the universe is expanding constantly.

The speed at which galaxies are moving away from us is thought to be between 30 and 60 miles per second for every million parsecs between them and the earth.

Apparently though, Boris is no longer in our universe – he's in an anti-universe called Paralela. Because of this, although Boris does indeed have to save the universe, there is a spark of originality in that it's not actually our universe he's saving.

From the brief extracts from the Encyclopaedia Paralela supplied with the game, Paralela is very different from our universe. All of this suggests that either Uncle George was one of the greatest scientists who ever lived, or that he was a crazed fool meddling with forces far beyond his control.

## SOUND

In its early stages, Universe boasts the sort of ambient in-game soundtrack that the Orb would be proud of. The effect of this is to conjure up a marvellous all-pervasive atmosphere of supreme calmness and cosmic loneliness, enhancing the gaming experience no end.

The title theme is suitably imposing and sets the scene quite nicely. It has a familiar-sounding air about it without sounding predictable or unoriginal.

In fact, throughout the game the music is of a very high standard. If you do find yourself reaching for the volume control, it will most likely be to turn it up.

Core says that during play the music adapts to the mood of the game in a manner similar only to the LucasArts IMuse system, making it something of a novelty on the Amiga.

There aren't really many sound effects, but they're not missed due to the presence of such a feast of sonic delight.

**82%**

## OPINION **85%**

Without doubt, Universe is one of the games of the year so far. It has class in copious amounts and is presented outstandingly well.

The combined icon and text control system is intuitive and friendly, making this a simple game to get to grips with and allowing for maximum user enjoyment.

While it would appear that Universe is smaller than, for instance, Beneath a Steel Sky, with regards to the number of disks, there is certainly plenty of depth and challenge.

Some of the puzzles encountered are completely mystifying, until suddenly the solution dawns on you and you wonder why on earth you didn't realise what to do a little earlier on.

As with all good adventure games, there will probably be times when you turn the computer off in frustration, only to return later when inspiration strikes, whereupon you will play the game for hours until you next become badly stuck. The difficulty level makes success all the more satisfying.

The smattering of humour which is liberally sprinkled throughout the game adds considerably to the experience. While Universe is not a comedy adventure in the mould of Leisure Suit Larry or even the Monkey Island games, it is good to see that it does not take itself too seriously.

Also, adventure purists will be happy that the occasional arcade sections are surprisingly well implemented. Another nice touch is that in a bar on Wheelworld, the arcade machines feature extremely good versions of timeless classics.

It is a shame that Universe is not hard drive installable since this would have made playing it an even more pleasurable experience, but to be fair the designers have tried to eliminate disk swapping wherever possible and loading times are kept to a bare minimum.

Universe is the type of adventure game that will be enjoyed by even those normally disinterested in the genre, and must be highly recommended.

£1.00 per disk

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| D166 | Star Trek Animations | Anims. of USS Enterprise |
| D177 | Star Trek Animations | Agatron no.17 More like above. Good |
| D280 | Jesus on 'E's' (2 disks) (N) | Excellent rave music |
| D282 | How to skin a cat | Amusing demo |
| D287 | Calendar Girls | Slideshow |
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| D313 | Techno Warrior | More of the same |

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| G021 | Demolition Mission (1 meg) | Similar to Balloonacy, good fun |
| G023 | Electronic Train Set (1 meg) | Construct own train set |
| G043 | Learn and Play 1 | Good for the kids. Blackboard maths. etc. |
| G044 | Learn & Play 2 | More fun for the kids |
| G053 | Mayhem | Brilliant shoot-'em-up |
| G065 | Pixie Kingdom (2 disks) | Tricky adventure game. Good |
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| G086 | Wraithed One | Good general knowledge quiz |
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| G303 | Strike Ball | Amos written baseball type game |
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| G308 | Gush | Very similar to pipeline |
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| G316 | Blood Runner. Monaco | Patience card game |
| G319 | Mega Race And Wacky Rabbit | Compilation |
| G324 | Psycho Santa | Waggle your joystick with this festive disk |
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| G330 | Friday 13th | Pretty Gruesome Platform Game |
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| G334 | Crazy Sue 2 | Popular platform game |
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| G336 | Fortress | Excellent demo game |
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| | | |
|---|---|---|
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| D301 | Retina | Excellent Vector film demo |
| D305 | Utopia | A1200 slideshow |
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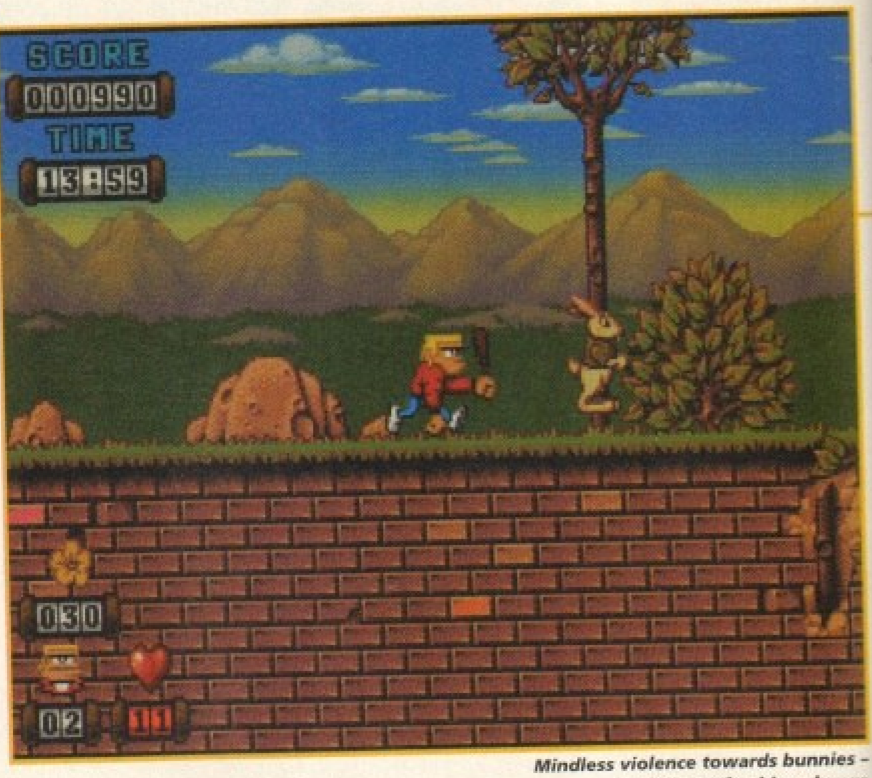
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## INTRODUCTION

Grudgingly, I put the disk into the drive dreading yet another dull platformer. But pushing all my reviewer's cynicism to one side though, I pledged to give it a fair trial. And then a strange thing happened, I was actually having fun. In fact it's the only thing that's brought a smile to my post-holiday depressed face all week!

Granted, Kid Chaos is another platformer, but Wales-based software house, Magnetic Fields, have really done something to add sparkle to a tired-out old formula.




*Mindless violence towards bunnies – makes a refreshing change*

> Chaos often breeds life, when order breeds habit
>
> ***The Education of Henry Adams***

# Kid Chaos

**Tina Hackett follows the travels of one prehistoric space kid courtesy of Ocean's new platformer, Kid Chaos.**

AMIGA SILVER AWARD

## ADDITIONAL INFO

The story of Kid Chaos relies on the futuristic image that man will be able to travel backwards and forwards in time (i.e. scientists from the 21st century travel back to the stone age to kidnap Kid Chaos).

Many theories have been pushed forward on the subject, making it a topic rich in opportunity to stretch the imagination.

With many explorations into space having been made, things that didn't even seem vague possibilities are now reality.

Those born at the turn of the century would have merely laughed at the thought of sending one man and his dog into space, but then in 1957 the first dog was sent orbiting around the Earth to determine the effect of weightlessness on animals.

And only a few years later we witnessed the first man landing on the moon. So, what may seem bizarre or impossible to us now may well become a distinct possibility in the future.

In the meantime though, people can only speculate, and images of time travel can still conjure the imagination without the restrictions of reality.

*Smash as much of the scenery as possible*



## GRAPHICS

It probably makes a pleasant change but I'm actually stuck for words. The graphics really are breathtaking and it's hard to sum them up well enough to do them justice.

Layers upon layers of parallax scrolling have been used to create a terrific sense of realism and depth, and updates at the most terrific rate to keep up with the action.

Consoles can disappear up their own cartridge holes because as far as I'm concerned this looks as good, if not better, than some supposedly superior console platformers.

There are many different settings, from Secret Gardens to Toxic Wastelands, and each one looks superb, picking up on a bright, cartoon like feel.

**85%**




*Pig-headed Kid Chaos finds his way around the Toxic Wasteland*



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hange





## STORYLINE

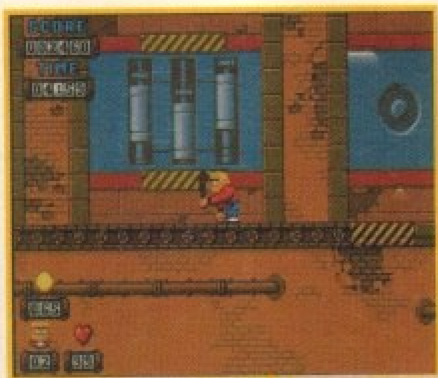
Hmm, a bit dodgy this one but here goes. Kid Chaos, a cave-kid, was kidnapped by evil scientists from the future and transported back to the 21st Century.

They experimented on him and forced him to wear modern clothes – this being the most contrived excuse for his dubious choice in clothing I've ever heard.

The kid, having somewhat of an aversion to being experimented on and having to wear blue slacks, decides to escape.

However, the exits are blocked by force fields but the kid overhears the scientists talking – in true blockbuster movie fashion – and hurrah, by smashing enough scenery this breaks the sources of the force field and unblocks the exits.

He escapes and now it's your job to guide him home.



*All kinds of obstacles block the way. Conveyer belts make manoeuvring difficult*

## SOUND

Yet again brilliant. The fast dance track works well with the style of the game and it even becomes realistically muffled when the character disappears under water.

Sound effects such as when Kid Chaos smashes the scenery works well and gives a great feeling of a real smash-'em-up fest!

**82%**



*An end-of-level shoot-'em-up against the clock*



*Kid Chaos bashes the computers to pieces – I know the feeling!*

## FLASHBACK

Take your pick really. There are enough platformers to look back on and compare. Well, I'll start with Zool, the game which sets the standards for other Amiga platfomers to follow.

It's a hard act to match but Kid Chaos does come pretty close, although Zool plays a little faster than Kid Chaos and looks slightly prettier as well.

Unlike most platformers though, Kid Chaos is not cute. In fact this is where it derives a great deal of its appeal. Instead of rescuing sweet fluffy bunnies you actually get to beat them out of the way with a club.

And instead of having to play an annoyingly cute sprite you get to play a Billy Idol look-a-like with an attitude for smashing the place up with a baseball bat.

- Publisher: Ocean
- Developer: Magnetic Fields
- Disks: 4
- Price: £25.99
- Genre: Platformer
- Hard disk install: Yes
- Control system: Joystick
- Supports: A500/A600/A1200/A4000
- Recommended: 6800 upwards



*The amount of detail makes for a visually superb game*

## OPINION 77%

Platformers have acquired somewhat of a reputation of late for unoriginality and it's great to see a game that really does break the mould.

Kid Chaos thankfully lacks any cutesy factors. It's fabulous to play, looks great and the end of-level games – wow!

The idea behind them is a sort of shoot-'em-up scenario and armed with a gun you have to clear the screen of various objects. On one level you even get to blast cute teddy bears. See, no sympathy for small, furry creatures and it's great!

The gameplay, although following the basic principles of platformers, adds a novel twist in destroying the scenery and cute animals.

Although it may not be politically correct, it means you get to keep your lunch down rather than these sickeningly sweet offerings we get these days.

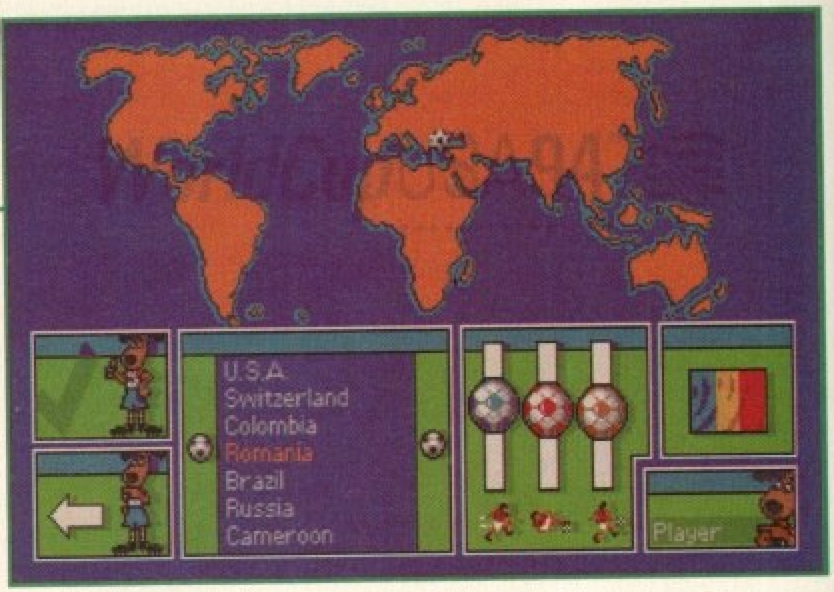
And just because it's a platformer doesn't mean life is going to be easy. Far from it in fact. It'll take some tricky joystick manoeuvring in some places, which may prove irritating for some but this is also an advantage in that the game will last and last, making it well worth the asking price.

# INTRODUCTION

With the many football games released this Summer to tie in with the World Cup, we all looked forward to some impressive new games, but so far there's not been one that's really astounding.

So with US Gold releasing this offering, the official World Cup license, it's bound to be good. Or is it?

Nice, fiddly team selection. Customise the game to include teams that didn't qualify.




**Tina 'striker' Hackett takes a peek at the latest footy game to hit the shelves courtesy of US Gold.**

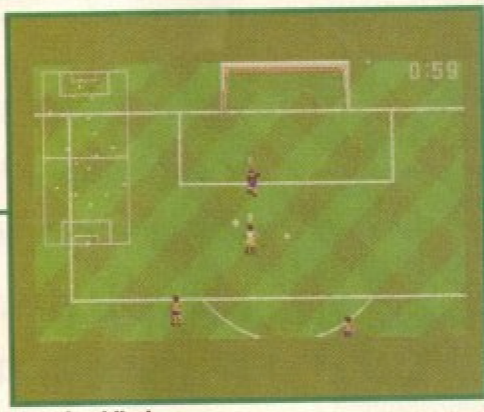
# World Cup

## SOUND

Yes, it does have some and at first it sounds quite convincing but after a while it does start to sound rather a like being in a train toilet while whizzing through a tunnel. Sorry, but that is the most apt description I can use to describe it.

It does change slightly when you take a shot at goal but somehow it just doesn't seem to create much atmosphere.

**32%**




*Note the ridiculous green borders. They are actually much worse on screen!*




*Sprite graphics look terrible and seem 'bitty'*

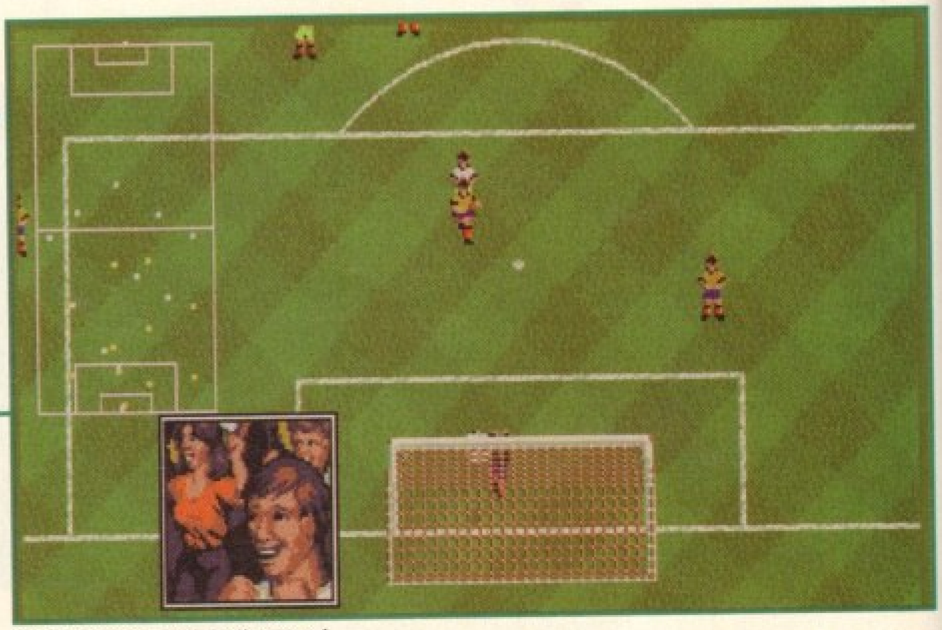
## GRAPHICS

What a sorry sight this is. Well, first off, we have these enormous green borders around the screen, reducing the actual game to almost half the screen. Why this has happened is anyone's guess, but it looks dreadful and makes it very distracting.

And then we have the actual sprite size which give the impression of "Oh, we couldn't quite make our minds up whether we wanted small or large sprites, so we've opted for some that aren't really either." They're too small to show any animation and too big to play as well as the tiny Sensible Soccer sprites.

Animated sequences have been used to show the referee and the crowd cheering after a goal, but they don't look particularly effective and slow the proceedings down to a snail's pace.

**29%**



*The animations, such as the crowd, slow the whole thing down*

## FLASHBACK

Many football games are available now to choose from and this just isn't worth forking out your cash for.

It does have a good range of options but these are available in other games anyway. One different option is to change the 'Glue Factor' – how close the ball stays to your feet when tackling – which works well.

The others though, such as Game speed, weather, and the feature to customise the World Cup match, have all been included in other games which are a darn sight more playable than this tedious effort.

Save your money for Goal or Sensible Soccer. They may be old but they certainly show these new games a thing or two. Or if you really do want a new footy game then I'd still wait...the computer footy games season ain't over yet!



*Throw-ins are quite awkward*

## SIMULATION

To get the idea of how World Cup USA really plays, simply imagine standing in a train toilet while going through a tunnel (for the sound effects), squinting to see only half the action and playing with a Space Hopper rather than a ball. That will be pretty close.

Seriously, it doesn't get much better than this and it is about as far away from the real thing as you can get.

Set-pieces are taken using a method of setting an arc of dots to direct the ball in the required direction. Unfortunately this isn't very effective and is fiddly to do.

Goalkeepers are too easy to beat and the player simply takes his shot and stands there. There's no following it through in case there's a rebound which he could redirect into the goal – incredibly irritating.

A one or two button joystick can be used and even though the moves should be quite simple to carry out, the controls feel unresponsive and clumsy.

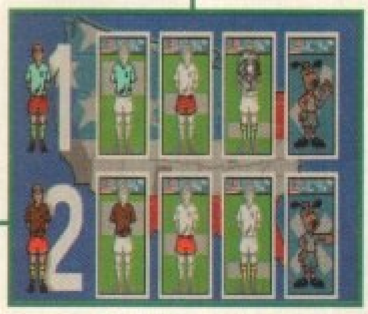
**62%**

# USA '94




*Penalty practice – and the goalie has passed out with the atrocious graphics!*

Publisher: U.S. Gold
Developer: Tiertex
Disks: 2
Price: £27.00
Genre: Sports
Hard disk install: Yes
Control system: Joystick
Supports: A500/A600/A1200/A4000
Recommended: 6800 upwards



*The useless Strip Editor, more fun than the actual game*

## OPINION 28%

As if all this wasn't bad enough, the game is full of bugs, it crashes and is glitchy – the graphics flicker terribly when two players cross over. The whole thing looks rushed out in time for the World Cup.

There was some hope with all the options available but this was let down by the most ridiculous option screens I've ever seen. They've insisted on using the official dog mascot at every opportunity – just in case we should forget that this is the official merchandise. This all leads to total confusion as you try to differentiate between one dog picture and another.

Incidentally, once you've changed all the variables to suit your game style they don't make that much of a difference anyway. There's even the option to change the colour of the teams socks. Is this meant to be serious? Does anyone really care what colour socks they have?

I mean anyone with a modicum of common sense would surely have realised and said, "Hey, why don't we concentrate on things that really matter, like gameplay?"

This is what counts after all. Somehow you don't feel in control of the game and there are no impressive moves to carry out.

Most of all, the game is incredibly boring! Even the most appalling football games manage to conjure some excitement especially in two-player mode. But not so in this case. You find yourself wishing for the final whistle and the game does nothing to evoke the competitive spirit.

This really is the spit in the referees whistle – avoid – unless of course you really are a glutton for punishment.



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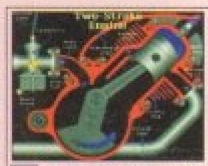
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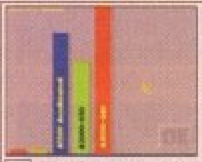
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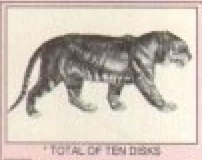
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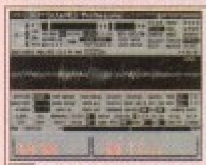


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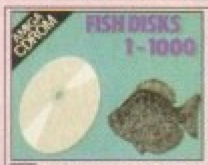
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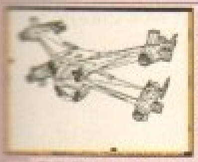
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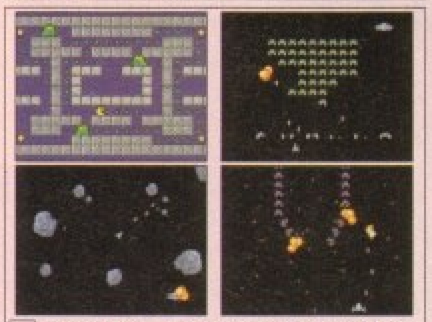
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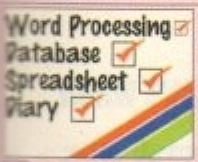
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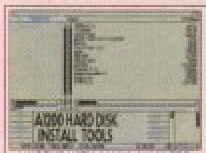
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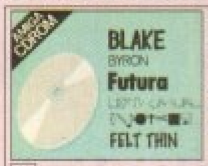


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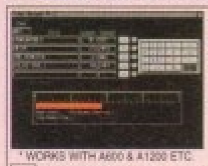


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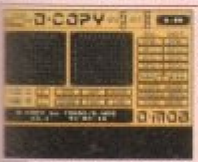
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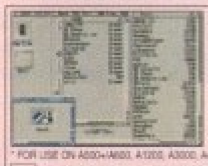
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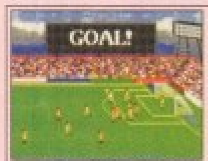
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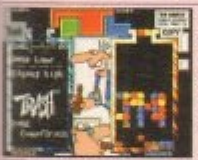
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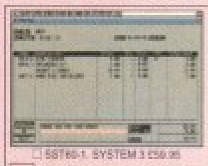
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# Bubble

**Gone are the days when Bubble and Squeak was merely the dreaded choice on the School dinner menu, because now it's a tasty new platformer from Audiogenic. Tina Hackett investigates what's cookin'**

## INTRODUCTION

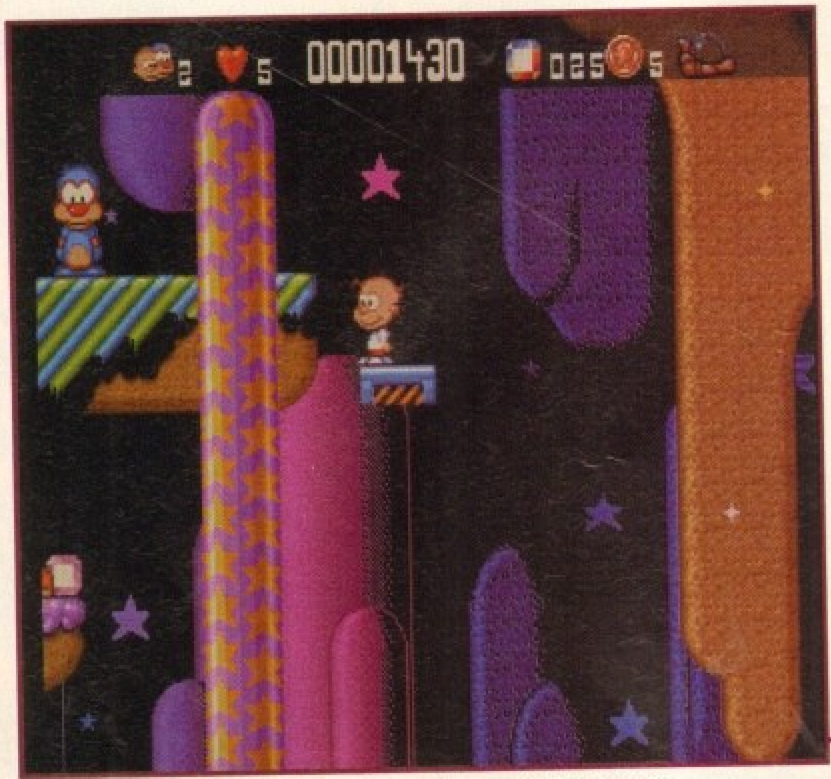
**Platformers seem to have made a bit of a revival of late, with some top quality titles making an appearance. It's finally been acknowledged that these games need a little more to them to make them interesting and Audiogenic seem to be on the right lines with their platformer/puzzler, Bubble and Squeak.**

## STORYLINE

Now this is a weird one! Apparently a character called Squeak just happens to drop through a Black Hole and asks you (Bubble) to become hero of the universe.

The land of Grool, Squeak's home, is under a reign of terror of the evil Kat of Nine Tails who has enslaved all the Grooleans and stolen their tails.

Squeak managed to escape and now needs your help to free the Grooleans.




*Although the characters are irritatingly cute the game is rather taxing*

## SOUND

Again it is in keeping with the platformer style using lively, jaunty tunes which fit in with the pace.

Sound effects are in abundance and are of a very high standard. In fact there seems to be a different sound for every action. From enemies sneezing at you to rippling water, they all sound realistic and work well. Background sounds have even been thought out, like birds tweeting.

At first I thought the character's sampled phrases (such as "Wait here" and "Come on") would grate on my nerves but they simply reinforce what is happening in the game.

**70%**



*The underwater effects look and sound brilliant*



*Find pots around the levels to reach higher platforms*

## OPINION **77%**

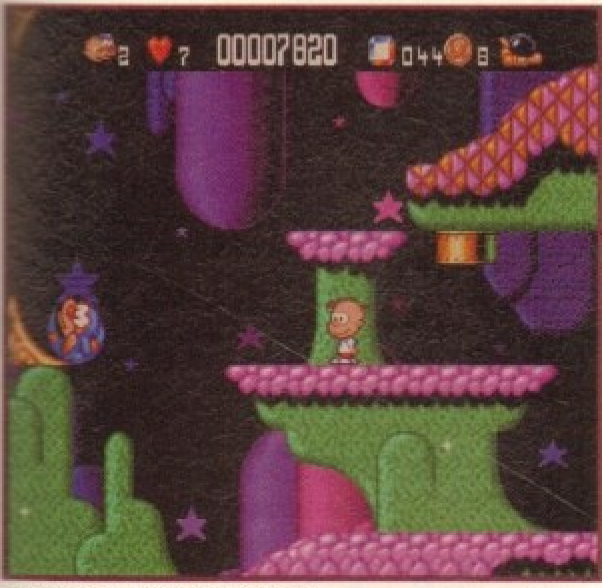
It is quite common for platformers to sometimes fall into the trap of being dull and not very challenging, so it's always nice to play those that involve a good puzzle element too. Bubble and Squeak does take a fair bit of working out and it's not a game you can just whiz through.

The puzzles require you to work out how to get the two characters around the levels by using the objects and character's abilities – for example, jumping onto Squeak's back to reach higher levels or operating the lifts with the switches located on different platforms.

This works extremely well and leaves us with a very enjoyable and addictive game.

It may actually be a little too cute for some but this doesn't mean it is an easy game. Ignore the misleading cutesy factors and it is a taxing but very playable title.

The password system is a more than welcome feature (although fiddly to operate) because in some places, if you make a small mistake like falling off a platform, there seems to be no way out other than starting from scratch again.




*Send him in a spin to fly over gaps*

## GRAPHICS

Although it looks nothing new and is the usual platformer type thing with cute sprites and bright, cheerful graphics, it does work exceptionally well and is of a very high standard.

The backdrops are detailed, the levels set out well and the special effects such as the lightning and the character becoming darker underwater look brilliant.

On the bonus level, you take charge of an underwater submarine and this is where the graphics really do excel. Using psychedelic, kaleidoscopic patterns to convey the rippling water, the scenery becomes part of the puzzle as you make your way through seaweed and foreground and background obstacles.

The characters have been nicely animated and add some humorous touches. For example, if Bubble is left standing he will yawn or Squeak will tap his feet.

**75%**



*Storms are brewing and the lightening spectacular but our fearless hero still braves on, even against deadly Rattlesnakes.*

# e and Squeak

- **Publisher: Audiogenic**
- **Developer: Audiogenic**
- **Disks: 2**
- **Price: £25.99**
- **Genre: Platformer**
- **Control system: Joystick**
- **Supports: A500/A600/A1200/A4000**
- **Recommended: 6800 upwards**

*Bubble Gum machines give Squeak special powers*




The game has many objectives which keep things very interesting. There are five worlds on the planet Grool and each one has at least five different levels. You also get to progress onto shoot-'em-up levels and bonus games.

On some levels the water will rise and cut off some of the lower levels. If either characters become submerged they will lose a life. This keeps things frantic and the pace exciting.

Gumball machines also play a big part believe it or not, and buying the Bubble Gum for Bubble results in giving him special powers to fly or move as fast, or jump as high as Squeak.

Plenty of attention to detail has been paid, especially in creating themed settings and imaginative sprites, such as the Stardust Caverns with it's Red Crawlers and Baseball Ducks who will hit any fire you hit back at them.

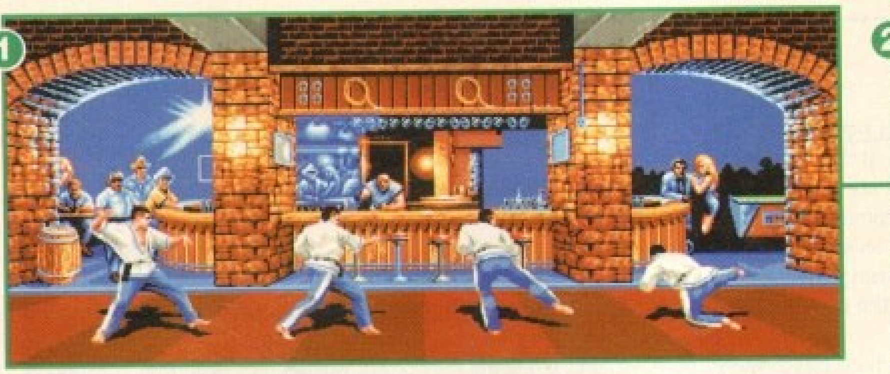
This is a very polished game, with a great deal of attention paid to every aspect, providing varied gameplay and detailed graphics. The game has been very nicely put together and although it is another platformer, it is of a high quality and has enough puzzles in it to keep it challenging.

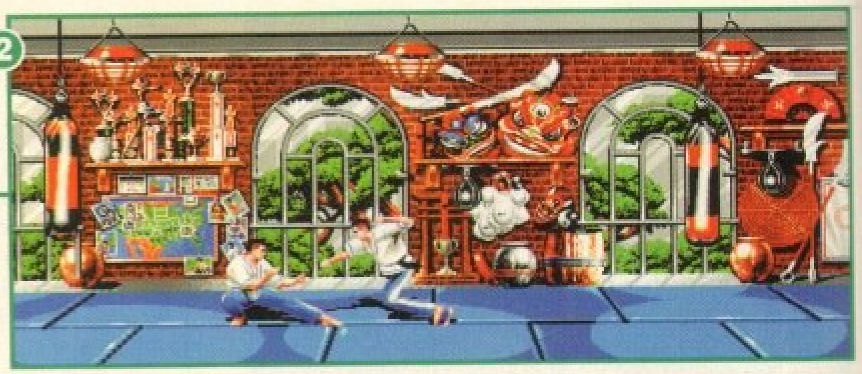
## FLASHBACK

There are many games in this puzzler/platformer genre but perhaps the closest to Bubble and Squeak is Core Design's Bubba 'N' Stix which involves a similar sort of gameplay.

In this case you have to use a stick character to get around the levels, whereas now it is an alien. Both have an exceptionally high standard of graphics and have many, logical puzzles to solve.

This is more than just another platformer and has many more aspects to the gameplay than usual.





# system analysis



**This is a true story. Neil Axe, unknown outside of the martial arts world, is about to become big news. Jonathan Maddock bows politely and takes a look at Millennium's forthcoming beat-'em-up extravaganza.**

Violence sells. Don't take my word for it, take a look at the facts. Street Fighter 2, Mortal Kombat and Body Blows have all been amazing successes across their own various formats.

The majority of these beat-'em-ups are jam-packed full of nothing more than "cartoon" violence. I mean have you ever been in or seen a brawl where one of the fighters has leapt 20ft in the air and fired lighting out of the tips of his fingers?

No, of course you haven't because, and here's a thing, computer games aren't real! That's not to say that there isn't a person out there who has spent twenty years training in martial arts, almost as much time studying ancient Chinese legend and is now ready to become the portal for the ancient and banished five guardians of the earth.

Sounds weird, but it's totally true. Neil Axe is his name and he's about to star in his very own beat-'em-up entitled MysterX – but his story goes much deeper than that.

Born in the year of the snake in Bucks, Neil Axe (real name) was first taught karate by his father at the age of five. He spent seven years learning karate-based self defence, before using the next couple of years to widen his skills in two other forms of karate, Wado Ryu and Shotokan.

After dabbling in boxing, Akido and Judo, Neil moved to New Zealand where a five year gap in his martial arts training was filled mainly with bouncing work in night-clubs.



On Neil's return to Britain, more study in several martial arts resulted in Neil's rise to the top of his chosen profession and eventually became known as Master Axe – but his story doesn't stop there.

Oriental legend has it that there are five guardians of the earth: Quazar, Stone, Storm, Aqua and Fire. All were banished from this plane 9000 years ago by man, who felt that he no longer needed their advice.

Since then, chaos has ruled the earth and without the guardians it seems set to continue. The guardians need to find a human host through which to project themselves into this world once more, but the host is a rare being and must possess a number of special skills.

The skills required are those of the fabled Manimal Warriors: Bull, Dragon, Crane, Leopard, Mantis, Monkey, Phoenix, Snake and Tiger. It will take many years to select the host, as a test is required for the chosen one.

In 1988 Neil Axe led a team of four men (Roger, Michael, Julian and Mr Axe himself) across the United States, sparring in various towns and cycling around 4000 miles from New York to San Diego.

This, as Neil believes, was the test. The guardians had appeared to Neil in dreams before the trip, but it wasn't until he finished his cycling quest (which incidentally raised funds for the Great Ormond Street Hospital) that he finally realised it.

Look I know it sounds far out, but Neil states very clearly that the five guardians wish to make their voices heard through him and that he is the chosen one.

Ridicule the story if you wish, but by all accounts Mr Axe is not one of those people that you'd want to mess with, but I swear that the above story is true.

The full official and impressive title of Millennium's beat-'em-up is Master Axe: The Genesis of MysterX, but it isn't a straightforward out and out beat-'em-up. Chris Elliot, the head honcho behind the creation of the game, explains just how MysterX will work.

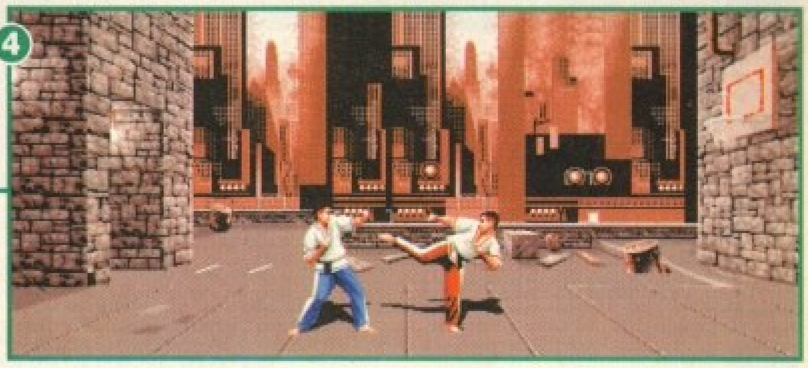
"The beat-'em-up will be split into four distinct parts: The Academy, Coast to Coast, Trial by Combat and Spirit Struggle. Each part will test the player on a slightly different level, as well as portraying varying types of atmosphere"

The Academy part is essentially a trainer level to enable the player to get friendly with the controls and practice all the moves needed to complete the quest. Spirit Struggle is a

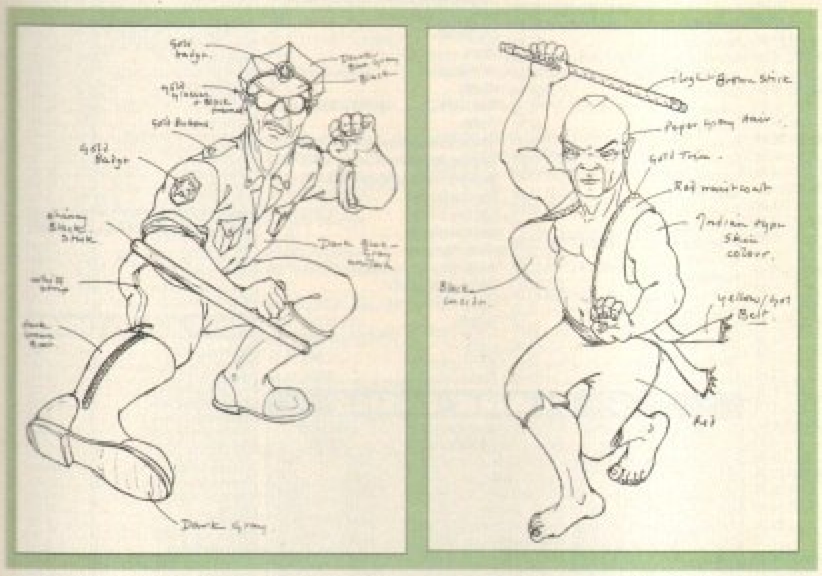


*The finished drawings of the enemies that will appear in Master Axe: The Genesis of MysterX*

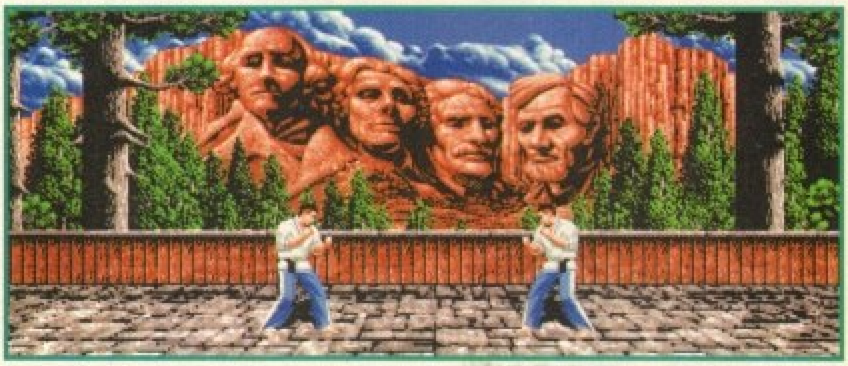




1. *At this stage in the development, only the Neil sprite has been completed and it moves exactly like Master Axe*
2. *In the training centre and just have a look at how much detail has been put into the background*
3. *The Neil sprite whose realistic fighting manoeuvres have been brought to the small screen*
4. *The back streets of New York, just one of the amazing backgrounds in MysterX*



*The preliminary sketches for Master Axe's opponents include a cop who Neil, Roger, Michael and Julian ran into while cycling across the United States of America*



*Neil Axe in front of the spectacular view of Mount Rushmore*

# MysterX



two-player section, whereby the competitors control the dark and light (dark representing evil, light representing good) side of one of the four characters on the spooky spirit plane.

Trial by Combat is another two-player level and is a tournament mode based on Neil and his comrade's adventures in places like Las Vegas, Los Angeles and Maui.

## SPRITES

Coast by Coast, which was destined at one time to become the first game in a MysterX series, is a one-player game featuring the previously mentioned cycle trek across the USA.

As well as Neil, Roger, Michael and Julian, one of which you'll be able to control, there are to be eight computer opponents who pop up during various stages.

The game is only in it's beginning stages and has a predicted release date of November – therefore only the Neil Axe sprites and a handful of backgrounds are fully complete – but already it's looking rather good.

Neil himself is more than pleased with the backgrounds. "I've spent months now looking at just about every other beat-'em-up there is," says Master Axe "and all right, I'm biased.

"I don't like special moves and I think that from a martial arts viewpoint, which some of them try to emulate, the movement is ridiculous. Apart from that though, there is a tendency to treat the backgrounds as an afterthought. 'A pier somewhere', 'a city street anywhere', that kind of thing. What Chris and Millennium have done though is just superb."

The A500/600 versions of MysterX will be released first, with the enhanced A1200 and CD32 versions following soon after. The A500/600 version may have slightly less moves than it's more powerful counterparts.

MysterX is going to be that little bit different from the norm. It's not a license, it's based on a real story and a real person.

Neil Axe will be punching and kicking his way on to the Amiga very soon and with plans for his own Hollywood movie and countless merchandising deals, the computer game is only the tip of the iceberg.

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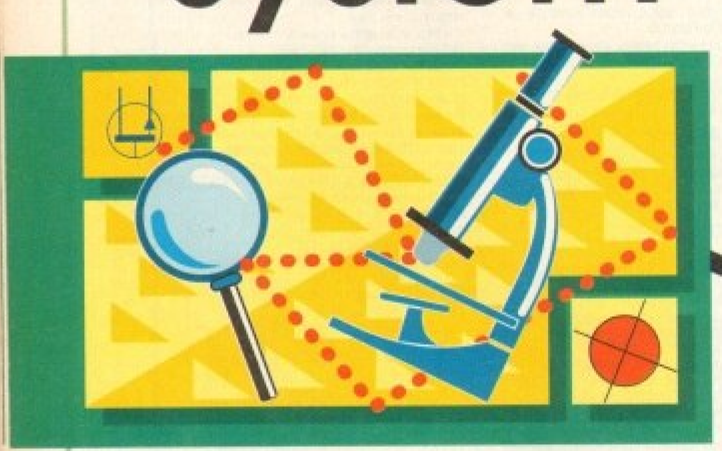
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# system analysis

# Dream

**Over four years in the making and it comes complete with sex, bad language and violence. Jonathan Maddock desperately searches for something to get those bloodstains, not nearly clean, but really clean...**



I know about or have seen almost every single Amiga game. Although I know at least one game a month will shine like a twinkling star, I also know that the others won't make the grade. Only a few games now genuinely excite me.

Theme Park is one product I'm eagerly looking forward to, the same goes for Ocean's TFX and Inferno, but there is one piece of software I saw a year ago which excited me more than anything I have seen in a long time.

Dreamweb, developed by Creative Reality and published by Empire, is now only a month away from release and about to make Reservoir Dogs look like Play School.

It's an overhead view role-play adventure game and on its menu is bad language for starters, violence as the main course with a small side order of sex for good measure. A banquet fit for a King!

Before some of you start writing to Points of View about the state of violent games and today's disaffected youth, Dreamweb has an adult theme and thus is going to be aimed at the same audience who have seen films like Blade Runner and Akira.

Empire are even going to give the game a voluntary 18 certificate, so angered parents need not worry – not that they should anyway because their kids need only watch the News at Ten to get their daily dose of violence.

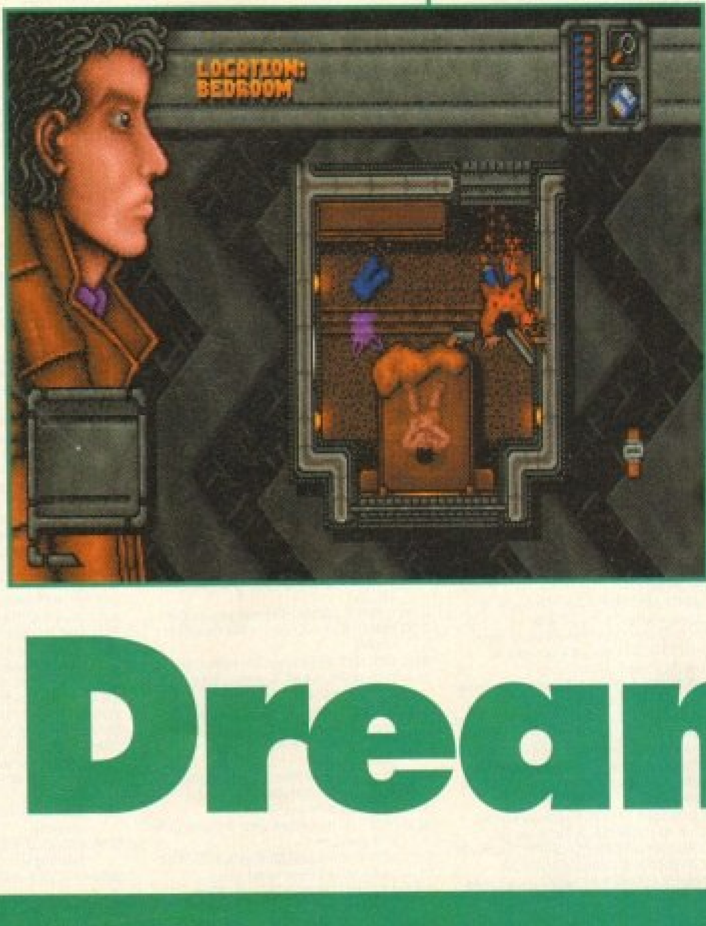
The Dreamweb is an endless dwelling of thought. Its core is occupied by seven




*The start of Ryan's adventure and time for him to tool up and go and kill his first victim*




*Ryan, on a visit to Louis, his dodgy druggy friend, gets himself mugged for his trainers*




*In Dreamweb there is an element of surprise and Ryan, by not looking over his shoulder has, unfortunately, just been blown away. Game over, man*

## Reality bites!

Creative Reality was formed about four years ago and consists of just two people – Neil Dodwell codes while Dave Dew produces all the graphics. The duo have worked on almost every machine and completed about 15 products between them.

Before Dreamweb, Neil and Dave created the wonderful Myth for System 3. The two were also responsible for several older Spectrum games including Nemesis the Warlock and Slaine from 2000AD, plus they've done various conversions onto the consoles.

Both developers have never had any formal training and never had a "proper" job. The two work well as a team and their best work is always something that they have collaborated on.

The Dreamweb concept was first conceived sometime in 1989. Creative Reality, like so many developers, got bored with linear platform games and then got the idea to do a role-play adventure. The name "Dreamweb" was what first started the whole project because Creative Reality thought that it was a powerful film-like name.

The game has been through many ideas and story lines and it's taken just over four years to complete. This in computer game terms is a hell of a long time, but Empire have let the lads have complete freedom to do what they want and firmly believe that Dreamweb is worth waiting for.

In the future, Creative Reality are hoping to do more games using the Dreamweb adventure engine. The duo are planning to use CD technology more and more as it is ideally suited to games like Dreamweb.

CREATIVE REALITY

controlling powers who influence the thoughts and actions of their hosts on Earth. The Dreamweb is watched over by the keepers. When any of the seven people on Earth die, their controlling power dies too.

A new power emerges which may be good or evil. The overall feeling of the Dreamweb is reflected in people's dreams on Earth. If the Dreamweb tends towards evil, dreams become nightmares.

The evil hosts come into conflict with the good hosts and a battle for status ensues for centuries. The battle swayed both sides, but evil has finally destroyed all the good hosts and it now controls all the dreams. The keepers decided that it was time to appoint a person on Earth to act for them and restore the balance.

## HOSTS

You play Ryan, the only person close enough to all seven hosts to destroy them before they reach entropy. When Ryan kills a host their soul is consumed into his body, sending the hero of the adventure into the Dreamweb.

Only when all seven hosts are dead will the Dreamweb's balance be finally restored. This concludes Dreamweb's mind-expanding epic storyline!

The game revolves around intricate object manipulation and Creative Reality are proud of the fact that every object can be examined in minute detail. Objects can hold many other smaller objects which can also be used (i.e. cigarette packets hold cigarettes and so on).

The objects can be picked up and dropped anywhere in the game, unlike most adventures which don't let you drop them. The game keeps track of all



*The guardians of the Dreamweb summon Ryan to assassinate the seven evil beings to try and restore the balance between good and bad*

this manipulation using complex data structures.

Dreamweb is a graphically huge adventure and as with the programming, it was all done by one person. There are over 4000 frames of animation alone, each frame hand-drawn by Dave Dew. The graphics are heavily stylised and give more than a nod and a wink to the visuals seen in Ridley Scott's Blade Runner.

Dave didn't use any clever techniques such as digitising – everything was drawn with his own fair hand. Most of the graphics were produced using Creative Reality's own adventure editor, but some of the larger sprites and backgrounds were created on Deluxe Paint.

I've seen a 99% complete version of Dreamweb and all Creative Reality need to do is add the ever-changing atmospheric soundtrack, but I can't really fail to be impressed.

I know this is a preview and not a review, but Empire have got a winner on their hands and I will have the wonderful pleasure of reviewing it for you next month. Just dreamy!




*Outside of Sparky's bar and there is a babbling drunk standing in the rain. Go inside to gain some important information*




*First assassination of the day and you have to shoot a rock star while he's indulging himself in a bit of hot sex. What a way to go!*

# web



*Creative Reality consist of just two. Neil Dodwell codes, while Dave Dew handles the graphics for Empire's imminent adventure*

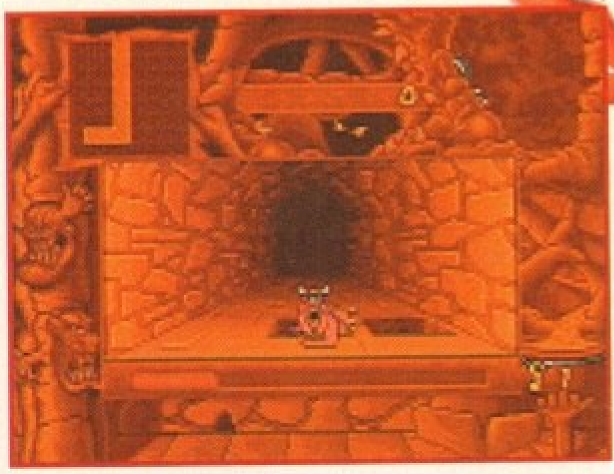



*Another evil target has been hunted down and she is about to be put to rest with a bullet in the head*



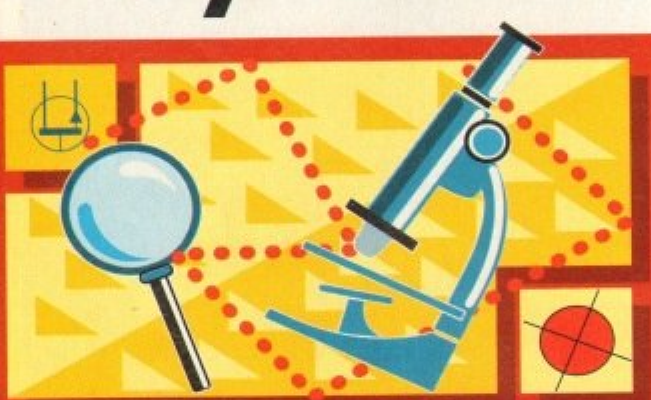
*The beginning of the game. A guardian on the bridge has been added, but graphically not much has changed from the first initial sketch*





*Litil Divil has, unfortunately, found one of the many traps in the game and I don't think he looks too happy about it either*

# system analysis



# Litil



**Down in the pits of hell, Jonathan Maddock grows some horns out of the top of his head, grabs his trident and takes a look at Gremlin's forthcoming CD32-only cartoon extravaganza**



*Mutt has found one of the doors which lead to one of the game's 50 or so puzzle rooms*

Over the last few years the term "interactive cartoon" has slowly translated into "unplayable game." This is the fault of the developers who have been putting too much emphasis on the graphics and sound and forgetting about what really counts, the playability.

The first interactive cartoons on the Amiga were the Dragon's Lair and Space Ace series of games. Technically, these software products were outstanding and caused many gamers' jaws to drop.

The down side, due to massive amounts of data involved, was that the games came on far too many disks which meant you were sentenced to a life in swapping hell.

The Sullivan Bluth Studios, famous for motion pictures such as Freddy F.R.O.7, All Dogs Go To Heaven and more recently Thumbelina, handled all the animation and did a really good job with the products, but they were all sadly lacking in the playability department.

3.5" disks are now becoming slowly defunct and it looks like the computer industry is quickly moving towards the CD format. The CD is able to hold huge amounts of data and some machines like the CD32 even have built-in FMV (Full Motion Video) modules, enabling the user to watch current movies on CD.

This means games like Space Ace will now become more commonplace and with the data storage problem sorted, prominence can now be, at last, put on gameplay.

The Irish division of Gremlin Graphics have been working on a game to fully test the CD32's capabilities in the interactive cartoon department. It's called Litil Divil and has taken four years to complete. Litil Divil's story begins in the



There are several items on sale in the shop and all of them are needed to complete the game. Collect the gold and they will be yours



Underworld and this is where the sands of time trickle eternally through the hour glass of infinity. Thus tomorrow is the same as yesterday and will undoubtedly be the same as the day after.

Time crawls along and only once is the monotony broken. This occurs once a year by a meeting of the Grand Council in the Chamber of the Ancients.

This occasion is where Mutt, the hero

# Divil

of Litil Divil, currently resides. The Council must decide who will be chosen to go forward into the Overworld, through the labyrinth of Chaos, and bring back the Mystic Pizza of Plenty. Every year, one of the Divils is selected, but as yet none have ever returned from their quests.

Each Divil in turn must reach into the sacred pot and pull out a straw. The one with the shortest must go and find the pizza. When it comes to Mutt's turn, he surprisingly gets stuck with the short straw.

After much celebrating from the other Divils and congratulations received from the Grand Councillor, Mutt is shoved towards the entrance to the Labyrinth.

Despite the terrible inscriptions outside, Mutt makes a start on his treacherous journey – this is where you take control of Litil Divil.

There are two distinct styles of game contained within Gremlin's arcade adventure. The first and main one is a 3D maze which Mutt must explore, looking for doors which lead to the second style of game.

Through theses door are puzzles or quest rooms and these must be successfully negotiated before Mutt is able to progress further into the maze.

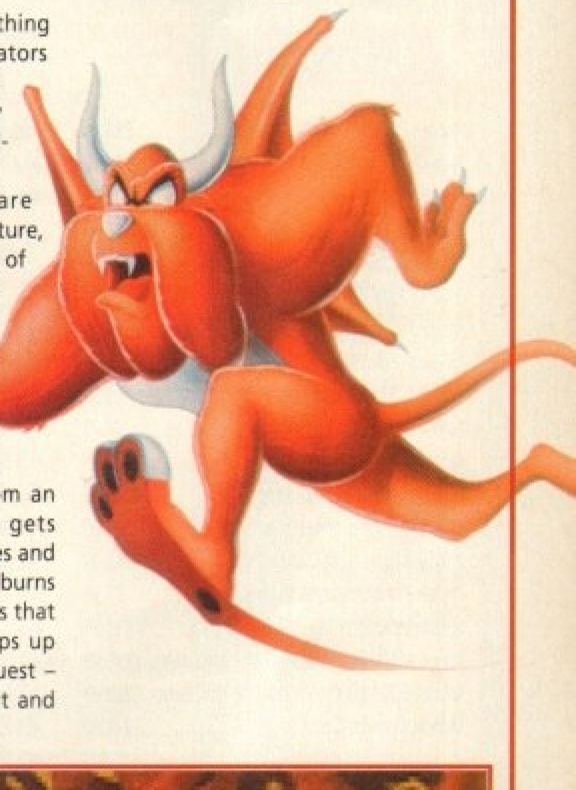
The puzzles range from dealing with huge spiders to playing a fishy game of "Simon says" with a wicked mermaid. Some of the puzzles are relatively straightforward, while some will have you racking your brains – but nothing that you won't be able to finally get past.

The 3D maze is littered with traps of all shapes and sizes. Each one, if sprung, takes some health-force away from Mutt. To restore this rapidly decreasing energy bar, Mutt can pick up loads of food which can be found dotted around the levels.

The most outstanding features of Litil Divil are the graphics. Apart from Microcosm, Gremlin's adventure is the best-looking game yet to appear on the CD32. The sprites and characters look set to rival anything that Sullivan Bluth have done or Disney themselves for that matter.

The backgrounds are exquisite and even though they are highly detailed, they don't detract anything away from the character sprites. The animation is top-notch stuff and it's no wonder that Gremlin Ireland have taken so long over Litil Divil.

Animation isn't the quickest thing to do in the world and the creators have taken care of every little detail, including drawing every single wall in the 3D maze individually.



Although the graphics are undoubtedly the game's best feature, Litil Divil does have a whole host of others, like the fact that it is riddled with humour all the way through the adventure.

The top quality gags look as though they've been nicked from an episode of Bugs Bunny. Mutt gets stabbed by spikes, falls down holes and fire shoots out of the floor and burns our hapless hero, but he still gives that shake of his cartoon head, jumps up and gets on with his perilous quest – that is until his life-force runs out and you lose a life. The whole game is topped off with a full cinematic CD score, giving Litil Divil just the right amount of atmosphere in all the right places. To go along with the various comedy moments, there is a full compliment of "wacky" cartoon-style sound effects.

As mentioned before, Litil Divil has been four years in the making and from what I've seen it's going to be well worth waiting for. With it's gorgeous graphics, superb soundtrack and the fact that it's playable, these make the perfect ingredients for a classic game.

Gremlin's spectacular CD32 game looks like it will become the first product to actually be called an "interactive cartoon" and hopefully this will entice more software publishers to use the CD32 to it's full capacity.



In one of the puzzle rooms and Mutt must make his way across the swamp by hopping on the stepping stones

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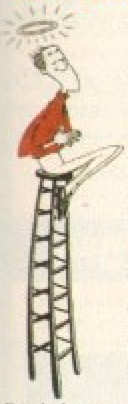


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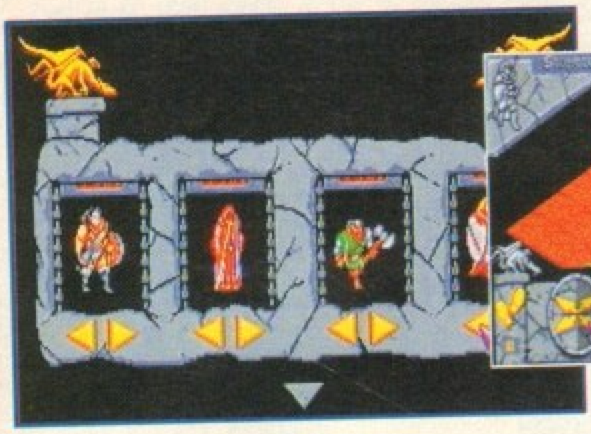
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## Hero Quest 2 - Legacy of Sorasil

Gremlin's sequel to the classic 3D isometric adventure, released back in May, was warmly received by both the press and the general public. This CD32 version of the game isn't that much different from the original Hero Quest 2. The only noticable change is a brand spanking new CD soundtrack to tantalise your ear drums while you wander around the fabled land of Rhia.

You can either use a mouse or the CD32 joypad for controlling your party of four heroes . Both are equally good, although the extra buttons on the joypad tend to make things slightly easier.

The game is relatively easy to play, but first-time adventurers might need to practise before attempting to complete the quest. Hero Quest 2 is divided into turns. You move your characters first then the Forces of Darkness respond.

Each of your characters moves in order and there are a range of options each can carry out. All have an allocation of 20 action points per turn, to be used in whichever way you require – remembering that the more complex the action the more points it will take to complete.

CD32 owners will be more than happy with Gremlin's superb adventure sequel. The 3D isometric graphics are spot on, the CD sound is a major improvement over the sonics heard in the computer version, plus it's still highly playable and incredibly addictive.

Whether you're using joypad or mouse, the control method is very simple, making the game a lot of fun to play. Even the younger player won't have too many problems with it. Hero Quest 2 will last you an awful long time and it's by no means a game you're going to complete in an afternoon.

If you've got a CD32 I heartily recommend Gremlin's fantasy role-playing sequel.

Publisher: Gremlin
Developer: In-house
Disks 1
Price: £29.99
Genre: Isometric adventure
Hard disk install: N/A
Control system: Control pad
Supports: CD32
Recommended: N/A

**75%**

## Apidya



Some older gamesplayers reading this might remember the first time Apidya raised its shoot-'em-up head. It was heralded, at the time, as one of the best and most original horizontally-scrolling blasters you could get for your Amiga.

Since then, Team 17 have waded into the computer industry wearing a pair of size twelve Doc Martens and brought out a range of classic games including the shoot-'em-up benchmark, Project X.

If Team 17 have the best Amiga blaster sitting in their stables, why have they bought Blue-Byte's Apidya and put it on their budget label for a ridiculously cheap price of £10.99? Er, I don't really know, but that's what Team 17 tend to do from time to time and with a fair amount of success .

Apidya is a five level shoot-'em-up with a distinct insect. You control a "bee" ship (which looks more like a wasp, but there you go) and must hunt down an evil sorcerer called Hexaa who tortured your partner to near death.

The sprites and background graphics are delicately crafted and even in today's era of super high-quality products they look just beautiful. The game boasts the largest ever animated end-of-level guardians, some of which reach to full screens in height and over two screens in length.

Unlike Team 17's Project-X, Apidya features a really good simultaneous two-player mode. The "other" player controls a drone which is able to protect the bee, but its abilities are limited. This is not a bad shoot-'em-up, but it's not brilliant, and whoever reviewed it when it first appeared on the Amiga scene was perhaps a little too enthusiastic. The main problem appears to be that it's just too hard, even with two players competing. Maybe that's just me being completely rubbish at shoot-'em-ups! For just over a tenner though I shouldn't complain too much because it will keep you entertained for quite a while.

To sum up, Apidya has gorgeous graphics, nice sound, plenty of playability, a touch of addiction, but the difficulty level is set just a tad too high.

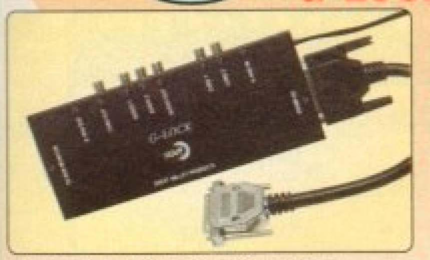
**67%**

Publisher: Team 17
Developer: Blue-Byte
Disks: 2
Price: [illegible]
Genre: Shoot-'em-up
Hard disk install: N/A
Control system: Joystick
Supports: A500/A600/A1200
Recommended: [illegible]

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## VIDEO EFFECTS
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| Max 32-bit RAM | 16Mb | 64Mb |
| Extras | SCSI | SCSI Ser/Par |
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*MIPS: Millions of instructions / second, a normal Amiga runs at .87 MIPS

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## GAMES

**18th Hole**
(CAT 225 – 2 DISKS – NOT 1200). This is a very good looking overhead golf game. Good multi player fun.

**3D Games Series**
(CAT 849 – 1 DISK). Includes a brilliant 3D adventure game, which is absolutely huge.

**Act of War**
(CAT 267 – 1 DISK). A very good Space Crusade style strategy game with three missions to do, and an array of weapons.

**Advanced Hero Quest**
(CAT 1920 – 1 DISK). Let the computer be the game master, and provide the challenge. You need the board game to play.

**Deluxe Galaga**
(CAT 1974 – 1 DISK). A true classic as far as shoot em up games go, and fantastically professional with it. Re-live some arcade nostalgia now.

**Diplomacy**
(CAT 1909 – 1 DISK). A very competent computer version of that great board game.

**Gnu Chess**
(CAT 2042 – 1 DISK – NOT 500). A very good looking playable chess program. Easily one of the best around.

**Golden Oldies**
(CAT 1308 – 1 DISK). A wonderful collection of arcade classics from the early days. A good nostalgia trip.

## GAMES

**Grand Prix 93**
(CAT 2692 – 1 DISK). A surprisingly deep and highly involved management game.

**Gush**
(CAT 1209 – 1 DISK). This is probably the best version of Pipemania you can get. Very playable and very addictive.

**High Octane**
(CAT 660 – 1 DISK). This is a corking overhead car racer for two players. It's full to the brim with thrills and spills, and plenty of weapon pick ups.

**Jellyquest**
(CAT 2336 – 1 DISK). A sort of Q-Bert puzzler, and a good one at that. Quite fiendish.

**Klawz the Cat**
(CAT 1735 – 1 DISK). This is a lovely cute platform game, with classic gameplay.

**LCD Dreams**
(CAT 1789 – 1 DISK). A collection of four old LCD hand held games revamped for the Amiga. Great stuff.

**NO I Mine 1**
(CAT 920 – 1 DISK). A clever Boulderdash game, with mind boggling puzzles.

**NO I Mine 2**
(CAT 454 – 1 DISK). More of the same, with tons and tons of frustrating levels.

**Pop Quiz**
(CAT 2250 – 1 DISK). Test your knowledge of pop history with this pop-tastic quiz.

## GAMES

**Red Dwarf Quiz**
(CAT 887 – 1 DISK). Test your knowledge of the TV series with this Dwarf-tastic quiz. It's very tough indeed.

**Road to Hell**
(CAT 565 – 1 DISK). Yet more overhead racing in yet another great game. This time you can customise your car as well.

**Starbase 13**
(CAT 1213 – 2 DISKS). This is an epic graphic adventure with lots to solve. It's very playable, and quite funny.

**Survivor**
(CAT 330 – 1 DISK). This is a pretty good RPG type adventure game. Simple in play, but hard to finish.

**Tetren**
(CAT 66 – 1 DISK). Tetren is a very good Tetris clone. It features a good selection of new oddities, and two-player option.

**Mr Men Olympics**
(CAT 1890 – 2 DISKS). This is a lovely game for kids. It features great graphics which match the original very well.

**Total War**
(CAT 1043 – 1 DISK). A brilliant version of the board game Risk. Six players computer or human compete, and battle.

**Wizard Wars**
(CAT 2959 – 1 DISK). This is a very polished RPG type board game. Quite involved and pretty tough to win.

## ASSASSINS

**Assassins 3**
(CAT 104 – 1 DISK). Megaball – great breakout game. Drip-polished Painter game.

**Assassins 123**
(CAT 173 – 1 DISK). Includes the excellent Artillerus 2 which is brilliantly addictive, and for up to eight players.

**Assassins 114**
(CAT 185 – 1 DISK). International Cricket is on here, and so is Insectoids 2. Brill.

**Assassins 95**
(CAT 286 – 1 DISK). Includes two football manager games which are quite different from each other. Very playable.

**Assassins 133**
(CAT 1139 – 1 DISK). There are two great Columns type games for you on this one.

**Assassins 138**
(CAT 1348 – 1 DISK). Includes the unmissable game Scorched Tanks. Totally addictive, and great multi-player fun.

**Assassins 128**
(CAT 1632 – 1 DISK). Three brilliant versions of some arcade classics. Includes: Space Invasion, Deluxe Pacman and Solar System Wars.

**Assassins 139**
(CAT 2282 – 1 DISK). Includes a good fruit machine game, and weird breakout.

**Assassins 135**
(CAT 2442 – 1 DISK). Has a brill Backgammon game.

## MUSIC/DEMO

**Fairlight 242**
(CAT 2781 – 1 DISK). Contains a very long video sequence set to the usual techno type music.

**9 Fingers**
(CAT 383 – 2 DISKS). An audio visual feast brought to you from Spaceballs. It's pop-video tastic and no mistake.

**Arte**
(CAT 562 – 1 DISK). A graphical extravaganza of a demo with funky-tronic music.

**Attraction**
(CAT 1243 – 1 DISK). A great music disk with some lovely thoughtful music.

**Banging Raves**
(CAT 213 – 1 DISK). Perhaps not rave exactly, but a good megamix of some classic tunes. A good mix of styles.

**Banging Raves 2**
(CAT 514 – 1 DISK). Another good megamix.

**Basso Continuo**
(CAT 1059 – 1 DISK). Ten excellent funky tunes are on here for your listening pleasure.

**Doop Re-mix**
(CAT 337 – 1 DISK). A good re-mix of that chart topping tune.

**Gastric Ulcer**
(CAT 2724 – 1 DISK). A good collection of some very hard rave tunes. Not for the faint hearted listener.

## MUSIC/DEMO

**Gospel Karaoke**
(CAT 10 – 1 DISK). It sounds unbelievable, but it is true. Karaoke Amiga!

**Kaos Theory**
(CAT 1114 – 1 DISK). It's rave-omatic Amiga time with some seriously hard tunes.

**Multi Megamix 2**
(CAT 2498 – 1 DISK). An almost commercial quality re-mix of some very famous tunes.

**Piece of Mind**
(CAT 960 – 1 DISK). A great 3D extravaganza demo with some very classy music.

**Scoopex 2 Unlimited**
(CAT 2241 – 2 DISKS). Good old Scoopex supplies 3 very well produced 2 Unlimited mixes.

**Sequencial**
(CAT 547 – 1 DISK). A roller coaster of a demo.

**For Your Mind**
(CAT 2462 – 1 DISK). Fast video, fast music, a really moving experience for sure.

**State of the Art**
(CAT 19 – 1 DISK). An all time classic demo. Brilliant visuals and a cracking dance tune.

**Star Trek Rave**
(CAT 2390 – 1 DISK). Is nothing sacred? Apparently not. A silly story with pictures which provides a good laugh.

**Techno Tracks 2**
(CAT 1664 – 1 DISK). Awesome music and some great visuals make this a must!!

***ALL THE DISKS LISTED ON THIS PAGE ARE COMPATIBLE WITH ALL AMIGA COMPUTERS UNLESS OTHERWISE STATED***

## USEFUL

**600 Business Letters**
(CAT 291 – 1 DISK). Lots of letters for lots of things.

**Account Master**
(CAT 1817 – 1 DISK). A good little accounts program to help keep your books.

**Amibase Pro 2**
(CAT 293 – 1 DISK). Probably the best database program you can get. Very usable indeed.

**Astro 22**
(CAT 2120 – 1 DISK). An excellent program to help with your astrological predictions.

**Astronomy**
(CAT 2847 – 1 DISK). Produces very detailed planetary information for astronomers.

**Classic Utilities**
(CAT 1863 – 1 DISK). A true collection of classics that you really should have.

**Create Adventures**
(CAT 1027 – 1 DISK). A very nice authoring program.

**Crossword Creator**
(CAT 2161 – 1 DISK). Takes the strain out for you.

**Crunchers disk**
(CAT 1227 – 1 DISK). If disk space is getting tight then this disk is definitely for you.

**D-Copy 3.1**
(CAT 2592 – 1 DISK). The best disk copier you can get.

**Dynamic Skies**
(CAT 1512 – 1 DISK). An amazing night sky viewer which is feature packed.

## USEFUL

**Easycalc**
(CAT 1042 – 1 DISK). Simply the best spreadsheet.

**Edword Pro 4**
(CAT 2071 – 1 DISK). A brilliant text editor which has a very good feel about it.

**Forecaster**
(CAT 607 – 1 DISK). If you're a betting man/woman, this disk could be up your street.

**Grinder**
(CAT 1249 – 1 DISK). A versatile screen converter.

**Hyperdrive**
(CAT 1116 – 1 DISK – NOT 500). Creates a protected RAM disk.

**Mandelmania**
(CAT 820 – 1 DISK – NOT 500). A very fast fractal generator with fast zoom in and out.

**Mandelplot**
(CAT 90 – 1 DISK). An excellent shareware fractal generator. Tons of fractal types.

**Magnum**
(CAT 2666 – 1 DISK). A good disk magazine creator.

**Opti Comms 2**
(CAT 2375 – 1 DISK). An excellent collection of tools for use with your modem.

**PC Task 2**
(CAT 1281 – 1 DISK). A working demo of this very good PC emulator program.

**Planetarium**
(CAT 1897 – 1 DISK). A simple program to display the position of the planets.

## USEFUL

**Pools Tools 2**
(CAT 442 – 1 DISK). A great rich quick program? Could be couldn't it?

**PP Mini Crunch**
(CAT 838 – 1 DISK – NOT 500). A user friendly interface for the excellent Powerpacker. Very nice.

**Professional Utilities**
(CAT 634 – 1 DISK). A very good useful and varied set of worthwhile programs.

**S-I-R-D-S**
(CAT 2214 – 1 DISK). Create your very own stereogram pictures and baffle your friends.

**Start of the Art**
(CAT 2317 – 2 DISKS). These disks are packed chocker with various graphics programs.

**Starview**
(CAT 1610 – 1 DISK). A night sky viewer which even marks out the constellations.

**Text Engine 4**
(CAT 1464 – 1 DISK). The best word processor there is. Very well suited to the Amiga.

**The Money Program**
(CAT 1811 – 1 DISK). An excellent home money monitor program. Very useful.

**Utility Disk Maker**
(CAT 2371 – 1 DISK). Proves very helpful for creating your own disks, serious or not.

**X Beat Pro**
(CAT 415 – 1 DISK). A very friendly music sequencer program. Very good for learners.

## ANIMATION

**Animation Studio**
(CAT 2406 – 1 DISK). A fantastic program to get you started in animation. Features the onion skin layering technique.

**Boat**
(CAT 933 – 1 DISK). A very nice animation of a typical English garden scene, with a boat.

**Bond's Last Stand**
(CAT 835 – 1 DISK). Bond cops it at last, and not before time too.

**Beach**
(CAT 1566 – 1 DISK). A great single screen picture postcard type animation.

**Human Cannonball**
(CAT 1599 – 1 DISK). An amazing story of how not to be a human cannonball.

**Linus**
(CAT 1018 – 1 DISK). A very original anim with a very good cartoon atmosphere.

**Raging Hormone**
(CAT 2780 – 1 DISK). Poor old hormone tries to pull a bird. He should know better.

**Raging Hormone 2**
(CAT 2473 – 1 DISK). That thick hormone just doesn't know when to stop. Very funny.

**Raging Hormone 3**
(CAT 2130 – 1 DISK). Hormone passes on what he has learnt to his son. What a shame.

**Savings**
(CAT 112 – 1 DISK). The post office savings advert quite a novel end. Funny.

## MISCELLANY

**Communicate**
(CAT 279 – 1 DISK). Learn how to communicate with sign language and many more.

**Octamed Tutor**
(CAT 2456 – 1 DISK). An excellent guide to getting the most from Octamed or MED.

**Spectrum Emulator**
(CAT 1448 – 1 DISK). Turn your Amiga into a 48k ZX Spectrum. A fast-ish Amiga is recommended though.

**Speccy Classics**
(CAT 498 – 1 DISK). A collection of classic old Spectrum games for use with the above emulator program.

**Speccy Classics 2**
(CAT 1499 – 1 DISK). More great games for emulator.

**Speccy Classics 3**
(CAT 2993 – 1 DISK). And yet more corkers.

**The Invisible World**
(CAT 1786 – 1 DISK). A visual insight into the tiny world of microscopic bugs.

**Titanic Cheats**
(CAT 1031 – 1 DISK). Absolutely chock a block full of hints, tips and cheats.

**Ultimate Cheat Disk**
(CAT 2583 – 1 DISK). Another disk packed to the gills with game tips and cheats.

**VIC 20 Emulator**
(CAT 1087 – 1 DISK). Turn your Amiga into a VIC 20. Comes with tons of games. Needs a fast Amiga to fully appreciate.

## 1200 ONLY

A COLLECTION OF DISKS FOR THE AMIGA 1200 COMPUTER

**Big Time Sensuality**
(CAT 2215 – 2 DISKS). An audio visual treat of a demo with stunning graphics and an almost CD quality soundtrack.

**Friday at Eight**
(CAT 2033 – 1 DISK). A very fast paced demo with a really brilliant music track.

**Full Moon**
(CAT 1740 – 1 DISK). A brilliant demo with a spooky intro and a good pacey tune.

**Klondike Deluxe**
(CAT 782 – 3 DISKS). A patience card game with some very beautiful picture cards.

**Maximum Overdrive**
(CAT 2986 – 2 DISKS). A very long full motion video demo which lasts ages.

**Megaball AGA**
(CAT 842 – 1 DISK). The most popular breakout type game gets even nicer. A must.

**Real**
(CAT 2379 – 1 DISK). Possibly the best AGA demo to date. Totally awesome.

**Relokick 1.4**
(CAT 2918 – 1 DISK). Brings downward compatibility to your new 1200 to help get some of those old programs working.

**Sleepless Night 3**
(CAT 583 – 1 DISK). An essential collection of serious programs guaranteed to work on the Amiga 1200.

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- A1200, 1942 monitor, hi-dens drive, hardly used, all boxed £520. Tel: 0628 661663 (David).
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- Contacts wanted. A.K. Jose, 3 Avenue de Nekkersgat – 1180, Brussels, Belgium.
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- Wanted: laser printer, reasonable offers considered. Call Adrian 0294 552585. (6-10pm).
- Philips monitor, CM8833 Mk2, includes leads, £100. Tel: 0268 761429.
- Amiga Buzz BBS, new telephone number is 0924 491461.
- Rombo Vidi 12, Sound and vision digitizer, £65. Tel: 0384 838477.
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- Wanted 68040 Accelerator for Amiga A3000. Tel: 0203 310719.
- Fresh Fish CD-ROM (May/June 1994) £15. Tel: 0904 624637.
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# AMIGA GUIDE

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HOW 2 Sample

# The law of



**Boot up your sampling package, plug in your leads and let the sounds play. Welcome to the exciting law-breaking world of sampling...**

Before you even load up your sampling package to record your sounds for your musical masterpiece, you need to know all about the law of sampling, otherwise you could find yourself in a lot of trouble.

Sampling has become a massive bone of contention throughout the music industry, and within the last few years it has become more and more popular due to professional sampling machines becoming more affordable.

Is sampling a legitimate source of new sounds or is it quite simply out and out theft? This particular argument will rage on until the opposing parties are blue in the face, but as far as the future goes, sampling is here to stay.

When you create a piece of music, you automatically have the copyright, but only if you write it down or record it. Even if someone else records your piece of music, you are still the author and thus have exclusive rights to the piece.

The important thing is proving that you came up with the music first. There are two things you can do which will satisfy any court of law. You can either post a copy of the work to yourself by recorded delivery, so the postmark can act as proof of the date. The other option is to leave a copy with your bank and get an official receipt stating the date of the deposit.

## RECORDS

That's the law dealt with, but the art of sampling has raised many legal problems. If you want to sample from a record, just how much can you get away with? An infringement only occurs if a "substantial part" of a piece of work has been copied or sampled.

The actual Copyright act doesn't state exactly how much this is, but it's as much the quality of the sample as the actual quantity. A very short musical piece can still constitute a substantial part, if it's distinctive enough. The four copyrighted notes of the Channel Four television theme tune is just one example out of many.

If you sample any part of any copyrighted work, no matter how small, you risk getting caught. You may believe that what you've sampled is from a relatively obscure source, but there will always be someone somewhere who might recognise it.

Even if you distort the sample, so that it's totally different from the original, there might be that certain somebody – maybe even the original artist – who will know the sound and sue you because you've changed it from its original form. Your case probably wouldn't even make it to a court of law, but you still could face a large

## Sample samples

**Creativity and imagination is the key when it comes to sampling something. That small vocal snippet or musical stab can either make or break a record. Here, in no particular order, is my top ten favourite sampling music moments.**

| Artist | Track | Sample in question |
|---|---|---|
| 1. The Prodigy | Charly | The sample that flew up from the underground and spawned a rave generation |
| 2. Orbital | Halcyon + On + On | The vocal off "A Fine Day" by Opus 3...backwards! |
| 3. Credit to the Nation | Call It What You Want | The beginning riff of Nirvana's "Smells Like Teen Spirit" fused into rap record that virtually assured a chart hit |
| 4. The Orb | Little Fluffy Clouds | Rickie Lee Jones babbling on about the sky and thus giving ambience to the masses |
| 5. Utah Saints | What Can U Do For Me | The sampling of Annie Lennox, a master-stroke that turned the track into a massive chart smash |
| 6. The Orb | Majestic (Millwall Mix) | Genius snippets from the cult TV comedy series, Monty Python's Flying Circus |
| 7. Senseless Things | Homophobic Asshole | The girl screaming "you want it" from the film Hellraiser, edited especially for the radio |
| 8. Ned's Atomic Dustbin | Suave and Suffocated | Dennis Hopper's mad ranting and raving from Apocalypse Now |
| 9. Carter USM | Falling On A Bruise | Michael Caine's classic "Know what I mean" speech from the film Alfie |
| 10. Public Enemy | Hazy Shade of Criminal | The words "Rebel Base" as uttered by Darth Vader, take on a whole new meaning |

# sampling

**Looking for that elusive sample that'll bring you chart success? Jonathan Maddock guides you around the sampling laws and tells you how to get better quality samples.**

out-of-court settlement. There are four safe options to stop you getting into trouble with your samples. First, go through the proper channels and get your samples cleared. If you've got a sample you're not sure about, you can try to get it cleared by getting in contact with the Mechanical Copyright Protection Society.

Check with the MCPS whether you need a licence and how much it will cost. If the publisher of the sample in question is not associated with the MCPS, then you must get in contact with the publisher yourself and get request clearance. Payment for the use of a sample may be a lump sum or a royalty on each recording sold.

The second option is to create your own samples. This technique is now being used by a number of artists and it involves the creation of "fake" samples by intentionally adding noise to your own sounds. Take a drum track for instance and add some background noise and 'hey presto,' you've created your own exclusive sound.

## TROUBLE

A third alternative is that if you believe the sample you want to use is questionable and you think you'll get in trouble for using it, then simply don't use it! I know it might totally wreck your original inspirational idea, but it's a lot better than getting sued.

Dance band, the Utah Saints had to get permission to use samples of Annie Lennox and Kate Bush, and they say that had the original artists not liked the use of their samples, then they simply wouldn't have released the records.

The fourth and final option is to get your samples from a reputable specialist sample CD company like Time + Space or AMG. These discs provide a wealth of noises, beats and effects in many different musical styles for full and part-time musicians, and are becoming more and more popular.

The convenience of the CDs are heaven-sent and all the sounds are free to use as often and as much as you like. They cost around £50 each which to the amateur musician might sound a lot of cash, but they are invaluable because you'll end up paying a lot more if you get caught sampling someone else.

As mentioned at the start, sampling is here to stay whether people have a problem with it legally or morally, but one things for sure, artists and musicians are using it more and much more creatively than ever before.

Sampling looks relatively easy, maybe because it is, but there are certain things that you should know that will really improve the standard of your samples. Here is a brief, but useful set of hints and tips for would-be samplers. The first tip might sound incredibly stupid to many of you, but for the beginner always read the manual from cover to cover. It's an obvious point, but there are so many people who by not reading the manual miss an important feature that they might benefit by.




## RATES

Try experimenting with sample rates. You don't always have to go for the highest quality frequency, you can always get some really dirty effect by using a much lower rate – plus it saves on a lot of disk space.

The best sampling rates are between 15k up to 28k, because this tends to get rid of all the top and bass sounds and leaves you with a nice 'middle' sound.

Always, and I mean always, make sure that your loop points are joined at around the same point. Failure to do this normally leaves you with a click sound as the sound loops, making for messy and amateurish samples.

It can be useful to shift the sample loop points about, especially where percussion is concerned, because this can sometimes provide you with a new feel in your beat.

Try using short samples rather than long, as this leaves you a lot more scope for experimentation, which of course is what sampling is all about.

Don't be too fiddly when it comes to tuning the sample. Try and get friends to listen to the noise because it might not need much altering as different people's ears have different perceptions of pitch.

Don't spend too much time on any sample, apart from the ones that you're definitely going to use in your musical masterpiece, because this just wastes unnecessary time.

One of the most important tips I can give is to always make sure that you save your work at least every ten minutes. Crashes by your computer can cause so much hassle and stress that this tip should never be forgotten.

When saving your work, make sure you place your samples in an organised library where they can be easily and quickly found when you need them. This will save a lot of time in the long-run.

The last thing I can really say is to always experiment with your samples. You never know, one quick reverse of a sample and a whole hit record could just be around the corner. Happy sampling!

## Useful Addresses

**Mechanical Copyright Protection Society Ltd**
**Elgar House, 41 Streatham High Road, Streatham, London SW16 1ER**
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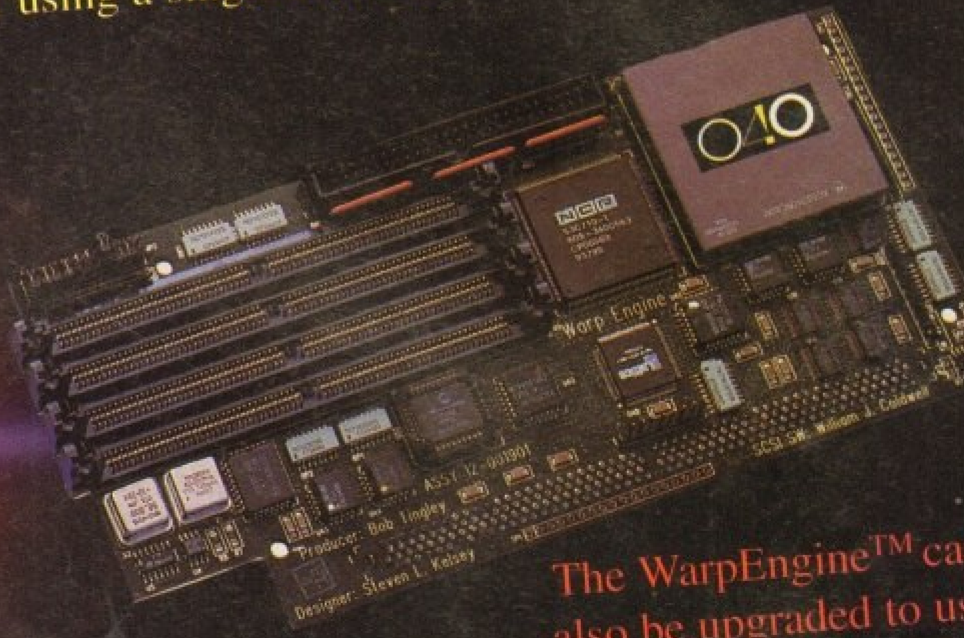
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# Lights,

## The video camera and its counterparts are the all-important aspects of a video production. Gary Whiteley shows you what you need and how to use them

The first two parts of this series looked at most of the Amiga hardware and software you need to add titles and graphics to your videos and grab images from them.

But what about the video equipment itself – the cameras, VCRs, sound recording and other equipment you'll need for capturing an event, and the additional Amiga add-ons you'll need to edit your raw source material. That's where we're headed this month.

Obviously, you're going to need a video camera so that you can record your own original material. The next time you walk down the main street in any major town, or you go to a shopping centre, take a look in some of the specialist electronics shops (Dixons, Currys, and the like).

You'll see a number of video cameras on display, in a wide range of shapes, sizes and prices, all with labels pointing out their latest whizz-bang features.

But what do you really need in a camera? Is fuzzy logic or built-in captioning a necessity? In most cases I would think not, but it isn't my place to tell you whether a particular feature is necessary for your purposes. I'd rather let you know about those you'll actually need – everything else is icing on the cake.

The first thing you should decide is what video format you want to use. For many people this will mean choosing either VHS or S-VHS, though some people will prefer Video8 or Hi-8. Ultimately, which system you choose depends on several factors.

Your main concern will probably be image quality. If this is the case, then S-VHS or Hi-8 should be your choice as each offers visibly superior quality over their VHS or Video8 counterparts and, as a consequence, S-VHS and Video8 formats are more expensive.

The type of genlock and digitiser you own (or plan to own) also has a bearing on the choice of format, as genlocks or digitisers are capable of accepting the more sophisticated Y/C signals from S-VHS and Hi-8 machines.

If you're planning on using your camcorder as an editing source, make sure it can be controlled externally via a Control-L port (aka LANC), because this is what your Amiga will interface to (via an appropriate editing package) to gain control over the camcorder's play and pause functions so that the appropriate video clips can be recalled as required.

### Zoom

Try to get a camera with a reasonable zoom lens, and macro too, so that you have more choice in the shots you can take. If the zoom can also be operated manually so much the better, because the motors which drive the zoom can quickly drain a battery during frequent use.

Speaking of batteries, get a few spares – they might be expensive, but there are times when a spare battery would have allowed you to get those brilliant shots you just missed when the power ran out.

Make sure your camera has a mains adaptor too, because if you power the camera from the mains it's unlikely you're going to run out of juice at a critical time.

There are other things you'll need to go with your camera, like a good fluid-head tripod and maybe a shoulder-mount, but go and buy a specialist video magazine and take it from there.

For sound recording, try to find a camera which will let you plug an external microphone in because, let's face it, there's no way that the built-in camera mic can possibly cope with everything that's thrown at it.

Try recording an interview on a windy day using only a camera mic and you'll hear why professional camera crews usually use a separate mic (and mic operator).

There's no way that a camera mic can capture just the sound of the interviewee and filter out the wind noise, even if you stick a woolly sock over it!

One further point. If you can, buy a camera which allows you to control the volume level manually as well as automatically, and make sure you learn how to use this feature.

Otherwise you'll fall foul of the built-in AGC (Automatic Gain Control), which tries its best to keep the recording level constant at the expense of the sound itself.

For instance, if you were recording an interview and a lorry drove past or a noisy aeroplane flew over, then the AGC would reduce the recording level to take into account the lorry or plane.

The result would be that the interviewee's recorded voice would drop in proportion to the overall drop in recording




*Make the investment in a high quality VCR now instead of later – think about the long term wherever affordable*




*The mini cams are highly portable and easy to use, but many feature restricted automated functions with no manual control*

## The out-takes

To edit video you need at least one video source (which could be a camcorder or a VCR) and a VCR to record onto. The record VCR should be capable of accurate frame positioning – the more accurate the better.

Again, the choice of VCR format is up to you, and it doesn't necessarily have to be the same as the format of the video source, as long as they can be connected together successfully. For instance, you could use a Hi-8 camcorder and an S-VHS VCR, since both use Y/C video signals.

One important point to note is that the VCR must, like the camcorder, be able to be controlled externally – for instance via infra red remote control – because this control will be used during editing.

But you can't just connect the video decks to the Amiga and start editing. You'll need an interface and control software of one kind or another, and the cost of such things ranges from several hundred pounds to several thousand, depending on the level you wish to edit at.

In most cases home users won't be doing A/B or 3-machine editing, concentrating instead on simple cutting from source to recorder and genlocking graphics and titles, so one of the cheaper packages would probably suffice.

Two-machine editing can't add wipes and fades between pictures, but it can let you cut out all the rubbish from your source tapes, add graphics and music and assemble a coherent program from a series of individual clips.

This is probably a satisfactory compromise for those birthday, holiday and other home videos which won't ever be seen by anyone but you, your close friends and family.

There are a couple of low-cost edit controllers on the market – Gold Disk's Video Director is well under £200, likewise Scala's Echo EE100 (which also requires ScalaMM300 and a fairly powerful Amiga with a hard drive). Both packages can control a

# cameras, action

level, and probably be completely swamped by the louder lorry or plane.

For me, as an ex-sound recordist, AGC is a big pain in the backside and can cause no end of problems.

Therefore it's important that (a) you can control the sound levels manually and (b) you can plug an external microphone in so you can get closer to your subject.

If you are able to mic your main sound source as closely as possible, the relative balance between it and the background sound will be much better – and the resulting recordings will be far more audible.




*Make sure to choose a camera that suits your particular requirements*

## Conditions

There are times when even the best cameras can't cope properly with the prevailing lighting conditions (unless you've got an infra-red night-vision camera, of course!).

Most modern cameras use CCD devices, which provide better lighting pick-up than the tubes older cameras were based on. Although many cameras have lighting gain switches to boost the brightness of a low-light image, this boosting also enhances the inherent noise in the image, making it appear more grainy.

The solution is to add extra lighting, where circumstances allow, so that the picture quality remains as high as possible. It isn't always necessary to buy specialised lights though, because depending on where, and what, you are shooting it might be possible to use lighting which is at hand. For instance, use an Anglepoise or table lamp to improve the lighting, switch on the room lights, or even just use a sheet of newspaper as a reflector to bounce some daylight onto a subject. There are lots of little things you can do to improve the lighting, but there are also times when proper lighting is an absolute must, whether for practical or artistic purposes.

If you cannot hire lights (like most video equipment, lights are often available for hire locally if you make a few enquiries) then you'll have to buy some.

Good lights cost a lot of money, so before you take the plunge take a trip to a large hardware store and see what kind of halogen lamps they have on offer.

I say halogen because they provide a lot of light while being compact in size, and you might decide that to save money you can improvise a set of lights for all but those special occasions when it wouldn't do to look like you're using makeshift lighting.

But for home shooting, animation or what have you, such lighting will usually suffice. Always remember that electricity can be deadly, and if you're not sure what you're doing, find someone who does who can either advise you or fix the lights up for you.




*The Charged coupled Device provides better lighting pick-up when compared to tube-based systems*

Control-L camcorder or VCR as source and an infra red-equipped VCR for editing. By defining a series of clips which you wish to copy from the source to the editor, the whole process can be organised fairly simply, if you have the right video equipment.

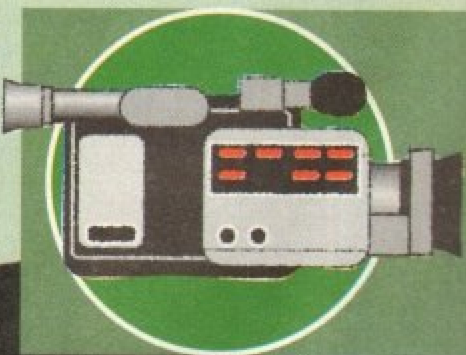
Obviously, each program has different features and there's no room for reviews here, so you'll have to look elsewhere for more details – and for other editing packages – but as a good start for your research check out Video Director and, if possible, Scala Echo. Other editing solutions include KRP's Video 20 series, VideoPilot 330 and Syntronic's Editman.

Of course, an edit controller isn't strictly necessary, and you can do simple editing by hand using only the play, pause and record buttons on the video machines. However, this is a very rough and ready method and there's no way you're going to get accurate edits this way, though as a cheap and nasty method it's hard to beat.

## Costs

There's not much I can tell you here except that good video equipment doesn't come cheap and there's seldom such a thing as a bargain when buying edit-capable VCRs and camcorders. If you're buying from scratch, expect to shell out at least £2000 on all the bits and pieces.

## Home video Part 2



**Gary Whiteley can be contacted by e-mail as drgaz@cix.compulink.co.uk**

**And, by way of a shameless plug, you could also buy his Amiga Desktop Video book (ISBN 1-898275-08-4) from Future Publishing (Tel: 0225 822510) or from any good bookshop.**



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Spectacular artwork by the renowned fantasy artist Tim White.

**VIDEOGRAPHERS** EMC are teaming up with a leading film/production team with the aim of conducting weekend seminars covering all aspects of Amiga related video production and post production for the beginner, semi-pro and full Pro. If you are interested, send an SAE along with a brief letter detailing your interests and we will forward you full information & course prospectus when details have been finalised.

# Room for improvement

Following on from last month, Paul Overaa explains how you can reduce the workload of a routine



Last month we were looking at a routine that can be incorporated into any macro that needs to make unit conversion changes (eg lbs to kilos) in blocks of text.

The idea was to use a loop to search for particular combinations, and whenever a number was found at the i'th location we set j to i+1 and compared the j'th word with the units parameter. After doing any conversions necessary, the next iteration of the loop was performed.

I said that an improvement could be made and in case you're still wondering what it is, just consider the case where the word$.j units test is successful.

The next iteration of the loop will then always be pointless because the next word$.i cannot be a number (since word$.i of that iteration will be word$.j of the previous iteration and this matched the specified units string).

This means that we can reduce the work that the routine has to do by eliminating those pointless loop iterations. This is done by incrementing i whenever a units match is found:

```
        if word$.j=unit$ then
        do
        word$.i=conversion_factor*word$.i
        word$.j=new_unit$
        i=i+1
        end
```

This simple change produces the ModifyBlock() procedure shown in listing 1. There are faster ways of doing the job but to be honest, when this particular routine was being written speed was not the only concern – flexibility and re-usability were also high on the agenda.

Notice that ModifyBlock() doesn't get involved with any inter-program communication itself. This is deliberate and is done to ensure the generality, and therefore the reusability, of the procedure.

The idea is that you should collect the text from the program in question, do any modifications in 'as application independent way as possible', and then send the replacement text back to the main program.

A typical paragraph-oriented use can be seen for instance in this Final Copy II macro fragment:

```
options results
'extract'               /* read paragraph */
text$=ModifyBlock(result,'feet','inches',12)
'delete'                /* remove existing
paragraph */
'type' text$            /* insert modified
paragraph */
```

In this case 'extract' pulls in the text (notice that the paragraph returned in ARexx's results variable is passed directly to the ModifyBlock() procedure as a parameter).

The 'delete' command removes the original text, and 'type' puts the new text in place. All easy enough to do but as mentioned, the key point is that the ModifyBlock() routine is pure ARexx code – it doesn't rely on any product-specific interface commands.

This brings us to an important general point. ARexx functions are the building blocks of all larger ARexx programs and programmers use them in the same way as the electrical engineer might use integrated circuit chips (electronic components pre-designed to do a particular job) to build an electronic circuit.

A function will perform an operation (perhaps make a calculation or, as in the case of our ModifyBlock() routine, make alterations to selected text block items) and may also return a value to the program which called it.

To use the example routine you supply the text block, the two units strings and a conversion factor. ARexx evaluates the right-hand side of the expression by making a call to the ModifyBlock() function using the parameters supplied.

It then assigns the function's return value to whatever variable is provided on the left-hand side of the expression that uses the function.

Written properly, a function should behave just like a black box – the function user provides some input (known as the function's parameters or arguments) and the function carries out its job, possibly returning some information to the caller.

To be honest, the user of the function doesn't even need to know how the function works – they just have to know what the function does, what information must be supplied, and the significance of the results produced.

You'll notice that I've tended to call the ModifyBlock() routine a 'procedure' rather than a function. This is to emphasize the fact that I've used the ARexx Procedure instruction at the start of my function definition.

The purpose of this is to force ARexx to regard all the variables used within the function as being local to the ModifyBlock() routine.

If, when you write a function, you use the Procedure keyword and pass all the data required by the function as function arguments rather than use global variables, i.e. variables that are visible throughout the program, then you'll end up with routines that can be easily extracted and re-used.

Needless to say, these types of ideas become more and more important as your ARexx scripts become larger!

```
ModifyBlock: procedure
parse arg block$,unit$,new_unit$,conversion_factor
numeric digits 4
number_of_words=Words(block$)

do i=1 to number_of_words
        word$.i=Word(block$,i) /* extract words from block */
end

do i=1 to number_of_words-1
        if DataType(word$.i,'N') then
        do
                j=i+1
                if word$.j=unit$ then
                do
                        word$.i=conversion_factor*word$.i   /* more complex conversions */
                        word$.j=new_unit$                        /* could be done using */
                        i=i+1                                          /* further procedure calls */
                end
        end
end

block$=''
do i=1 to number_of_words
        block$=block$ word$.i /* rebuild block */
end

return block$
```

***Listing 1: The improved procedure provides a good example of the use of local variables***

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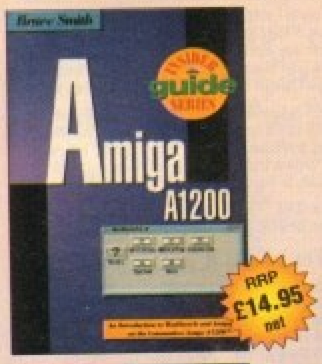
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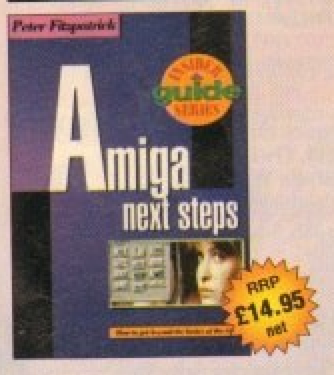
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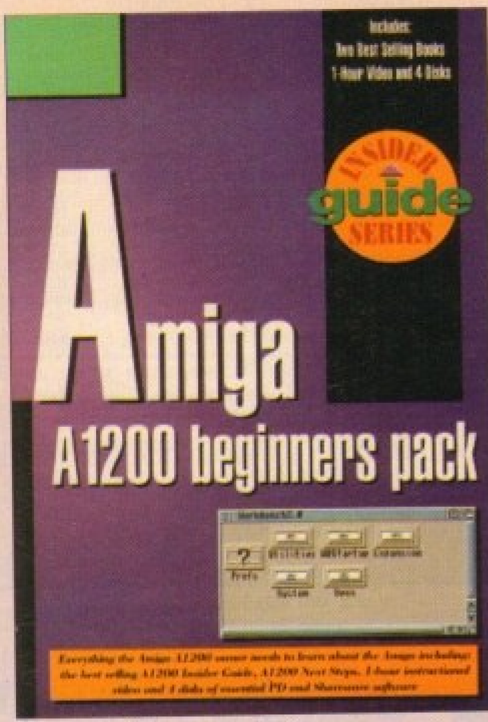

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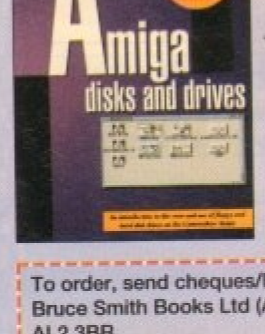
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# Blissful union

The Amiga and video are two words that belong together. Adam Phillips talks to Crystal Haze, a video graphics company

A one man company, Crystal Haze Graphics has been in operation for the last four years producing various pieces of work for a whole range of clientele but, specifically, the video market.

Run by Simon Hough, a 21 year old entrepreneur and commercial artist, the business has gradually climbed up the ranks from a struggling beginner to a relatively successful and respected firm .

Based at his home in Birmingham (Hough believes that an office for a small operation such as his is a waste of money), Simon has been beavering away on his two Amiga 4000's creating 3D stills and animation for television and video alike.

One machine is used for creating objects while the other busies itself with the lengthy task of rendering. All graphics are created with Imagine but, when Lightwave PAL arrives, Simon intends to jump on the bandwagon of the excellent package.

He first started dabbling in 3D at the age of 17 when this very magazine provided its customers with a Real 3D demo coverdisk. After playing round with it for a few weeks, Hough was hooked.

Flicking through a magazine one day, he came across an advert from Matt Black, part of the pop group Cold Cut, who was looking for computer-designed graphics to include in their latest video.

## BREAKTHROUGH

Putting several images on disk, Simon posted his work wholeheartedly believing that he would hear nothing in reply. A couple of days later, Black was on the phone: "I want more of your stuff!"

With the success boosting his confidence, he began to peddle his wares at local video production studios. Hough secured several deals due to his low prices when compared to the competition.

Due to his association with Matt Black, Simon was approached in mid '93 by Melvyn Bragg of the South Bank Show who wanted some animation done for a new series called Opening Shot .

The sequence they were asked to do was a visualisation of a section in Terry Prachett's book, Only you can save mankind. He only had two weeks in which to produce a space battle sequence for the programme. The end result was a resounding success, with both Bragg and Pratchett highly impressed with the graphics produced in such a short space of time.

With this arrow to his bow, Hough has continued to steadily climb the career ladder and earn himself a healthy £18K a year for his work.

Coming up is work on a series of exhibitions for a large freezer manufacturer and for Spender speakers who have asked him to design what will appear on the video walls at an up-and-coming show.

Of course, Hough intends to use the Amiga exclusively for any graphics operations undertaken. He is adamant that Amiga is the best machine for the job: "software support is amazing. Lightwave. Imagine – it goes on."

Various forays in to the PC world and Windows have left him cold – "I don't want to know, I simply don't like it."

At the moment, Simon's burning ambition is to make it in the pop video market where there "is so much scope. You can let your imagination run wild."

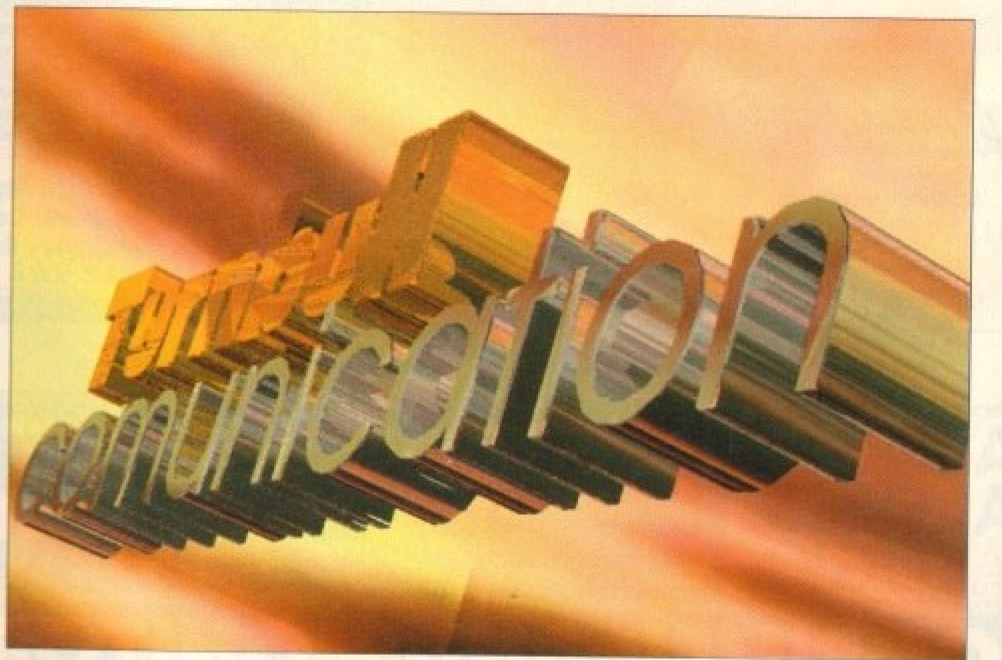
With a healthy portfolio of images logged in his hard drive, we may well be seeing the Amiga-fronted Chart Show displaying his name at some point.




As well as video work, Crystal Haze also dabble in other media areas such as BBS's




These images were all produced on Imagine



Some sequences provided for video houses are animated. This example moves in from the side and rotates towards the viewer



## Watch your back

A word of caution though for those thinking about setting up their own graphics company. " The biggest mistake you can ever do is to tell people that you use an Amiga. You go to the potential customer and tell him you use an Amiga and they'll say " Oh, my son uses one of those for games, your finished results can't be that good."

Simon continues," they expect a Silicon Graphics machine or a Pentium PC. I thought that kind of attitude was a rumour when I first started out but it's actual fact."

He believes that if Commodore are ever to break their games-only image, it's going to take a serious turn round in marketing and even a renaming to pull the focus of punters away from the Amiga "game only" label.

"The marketing people at Commodore need to be given the push. Television programmes such as Babylon 5 use the Amiga and Commodore still can't get the machine off the ground."

As for those of us who wish to use the Amiga for something other than games, Hough has these words of advice: " For those people trying to start out, don't get depressed when people put you down. Watch out for individuals trying to exploit you and watch your back."

Crystal Haze Graphics can be reached on 021-421 4835 (after 6 PM, the line becomes a BBS).

# Doing it on the cheap

Recession? Oh, that recession! Paul Overaa provides a timely reminder about keeping the cost of your music interests to a reasonable level

Most of us, given the chance, like spending a few bob but the chances are that we never have quite enough of the green stuff floating around to buy everything we want.

Software is a typical case so this month I thought I'd look at some of the midi/music PD and shareware offerings that are available. I've chosen the SeaSoft Computing library simply because they seem to provide more music-related offerings than most other libraries.

With SeaSoft's strong MED/OctaMED connections it's not surprising that a great many MED/OctaMED related disks are available.

Total Irrelevance, the disk magazine from MUG (MED Users Group) costs £2.50 and is worth looking at since it always has an interesting selection of articles.

If you want a taste of what it is like then you can in fact get the best of the 1993 issues on a three disk set for £4.50. Other MUG related offerings include the Friends of Paula volumes one to four, which are modules for use with OctaMED, Making Traxs Volume one, Musically Challenged, and Microcraft Volumes one to four.

There are also Drumkit samples Volumes one and two, Bass Sounds, and Brass & Woodwind IFF sample disks available, again courtesy of MUG.

Of course IFF samples are found in abundance throughout the public domain and as well as the obvious sources, such as the disks just mentioned, you can also create your own using a sound sampler.

You can also 'borrow' samples from PD games and demos or other legitimate sources (lots of magazine disks will include sound samples that can be used for your own purposes).

Finding such samples is easy enough if you only have a few directories on the disk – especially if the samples have been given obvious names such as crash.iff, bang.snd or wallop.8SVX.

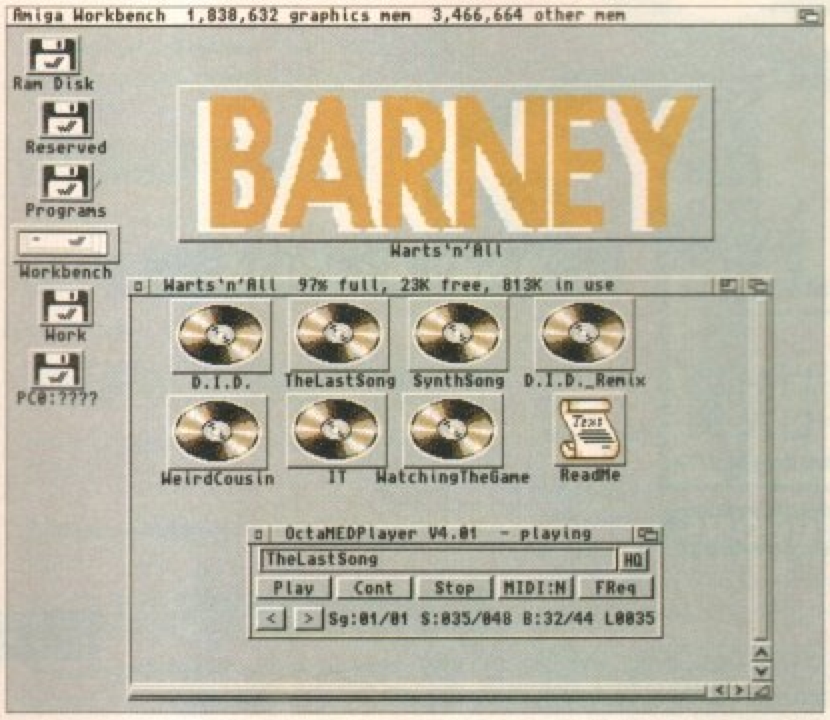
Locating them when the samples have less intuitive names (eg DX802) can be much harder, especially if the disk has many nested directories. More to the point, it may take a lot of time to look at every file in every directory!

The result of course is that all too often you can miss potentially useful sound samples just because they are not easy to identify. Fortunately there's a nice easy solution – we automate everything and let the Amiga do all the hard work.

I've used a Shell utility called Search for a number of years to look not only for 8SVX sound samples but all common IFF files (ILBM pictures, SMUS files etc).

It will even find things like Music X MSCX and standard Midi files (SMF Files). This utility, incidentally, was provided on the February '93 cover disk but since it only takes 8k of disk space it's been provided again on this month's cover disk for the benefit of any of you who missed it the first time around!

To use it just open a Shell window and type Search followed by the disk drive to be looked at. Search df0:, for example, will search all of the directories of the disk in drive df0 and give you a list of the required files and their directory locations. This is the sort of output you'll get:




***The MED User Group's 'Barney – Warts 'n All' is typical of the (high) standard of ready-made music available. It's a pity you can't hear it playing!***

```
Amiga Computing IFF/SMF Search Utility (Paul
Overaa 19xx)...
IFF 8SVX:  df0:FX/s1
IFF 8SVX:  df0:FX/s2
SMF File:  df0:tracks/complete/title.mid
Function Complete
```

If you are searching a high capacity hard disk partition or a floppy with many files and nested directories, the program may take a minute or two to locate the required information but it will be a lot quicker than other methods!

You can, incidentally, cancel the search operation at any time by hitting control-C or control-D. If you need a permanent copy of the program's findings just redirect the screen output to a disk file, or to the PRT device.

## And there's more

You'll also find plenty of other Midi/Music items floating around the SeaSoft library. X-Beat Professional for instance is a particularly good shareware drum sequencer.

If you want to learn more about Midi then there is a Midi tutorial disk written by Kevan and Garreth Craft that's worth looking at, and the same authors have also produced a large selection of Music X and Amiga/PC Midi files that are available at £15 per set (with a MidiCraft demo disk available for £1.50).

In addition to this, SeaSoft also distribute the AM/FM disk-based music magazine which now has about 18 issues under its belt. A similar number of AM/FM sample disks are also available along with a variety of other disks containing Midi songs, larger music utilities etc.

There are of course loads of ready-made songs available for use with the freely distributable OctaMEDPlayer module player utilty. A disk called Barney – Warts 'n All provides a good example of the quality available and is just one of the many song collections available nowadays.

In general the disk magazines cost £2.50 per disk and normal PD/shareware utility and sample disks £1.50 (an extra £0.50 for postage and packing needs to be tagged on to each order).

With samples, Midi files, disk mag and tutorial-type disks you'll usually encounter few problems in using the disks but, as with all PD/shareware stuff, not all utility programs will work with all Amigas.

X-Beat Professional V1.0, for example, does not run on my A4000! You'll find the SeaSoft ads in most issues of Amiga Computing and obviously the best idea is to give them a call before ordering, just to confirm that a particular utility will actually run on your machine. SeaSoft Computing can be reached on 0903 850378.



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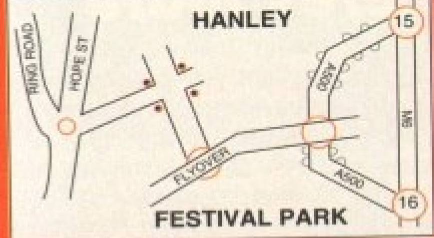
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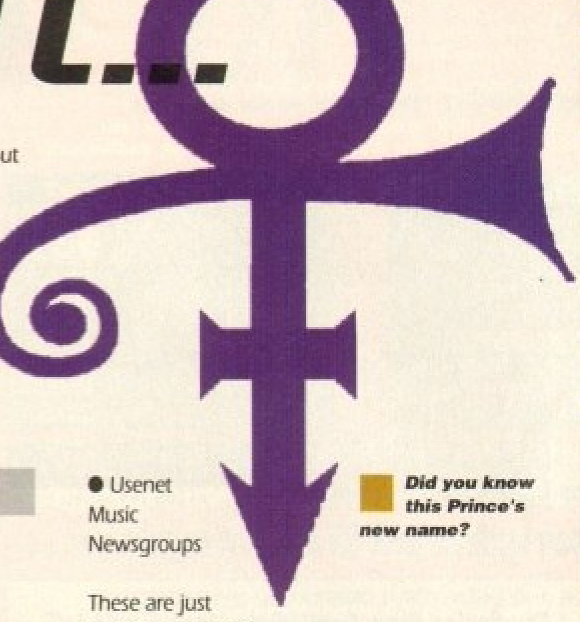
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# let's talk about...



Did you know this Prince's new name?



Phil South explores all the places on the Net where you can get hold of info and pictures and talk about your favourite musicians

We all have favourite musicans, don't we? In pubs and at colleges all over the country, indeed all over the world, common ground is formed by the sort of music we are into, the sort of sports we like and the sort of computers we like.

The Net is just an extension of those little items of small talk that we use in real life, so it's only fitting that the Net should have places where you can talk about music.

In your search for bits and bobs about your favourite musicians, your first point of call should be Archie. Do an Archie search using your favourite musician or type of music as the keyword.

This will lead you to a few sites that carry information or pictures of your fave raves. To get you going still further, here's a list of things I've found useful:

● **Electronic/Inductrial Music Zine List** – A list of electronic magazines based on electro/industrial music. You can obtain the list using anonymous FTP to:

```
ftp.spies.com
```

using the directory path:

```
/Library/Misc/
```

and download the file:

```
electron.zin
```

and there you are. A whole list of sources about this type of music.

● **CyberSleaze** – The sleaze guide used to be available from mtv.com, but this is now called metaverse.com because the sysop used to work for MTV but got the sack, so MTV won't allow him to use the domain name. Send a message to:

```
adam@metaverse.com
```

asking to suscribe to the cybersleaze magazine, or better yet why not cop it via Mosaic at the metaverse WWW server?

● **Techno/Rave Gopher** – Although for the last few days this service has been offline, the Rave gopher is a good source of pictures and info about the Rave scene in both the US and UK. Get it by using Gopher to go to:

```
techno.stanford.edu
```



Get pictures of your favourites...

● **Song Lyrics Gopher** – If you want to find out the lyrics to a certain favourite song, simply Gopher to:

```
gopher.micro.umn.edu
```

and choose the menu:

```
Fun & Games
```

then choose:

```
Music/Music Archives/Lyrics Archives
```

and just pick your artist from the alphabetical listings.

● **Allmusic Gopher** – Another music gopher is at:

```
allmusic.ferris.edu
```

● **Music Archives** – One of the very best music archives is via anonymous FTP at:

```
ftp.uwp.edu
```

although you may find it's too busy to get on once the USA wakes up. It's a very popular site and is often swamped.

You might also like to try:

```
ftp.sunet.se
```

which is where ftp.uwp.edu get their pictures, and in fact this is where this issue's pictures come from. There's hundreds, so why not go and check them out for your favourite artists?

Also, there is a superb list of music trivia at the excellent Rutgers Gopher site:

```
quartz.rutgers.edu
```

which is a place to be recommended for just about any Net surfing you might have in mind, as they have links with a number of other interesting sites. What is there is pretty interesting too, without the need for you to explore further.

I would also recommend RTFM, and MIT Gopher site:

```
rtfm.mit.edu
```

which also has some great music material. Quartz, RTFM and Spies are my favourite Internet sites of all of them.

Along with the WELL Gopher, these are the places I visit most often on the Net, as they provide huge resources of information but also provide useful links with similar sources, including in most cases each other.

● Usenet Music Newsgroups

These are just some of the ones I frequent, Mr Sad that I am, but you can be sure that your favourite music is catered for somewhere on the Net.

alt.fan.frank-zappa
alt.fan.laurie-anderson
alt.fan.spinal-tap
alt.music.alternative
alt.music.enya
alt.music.brian-eno
alt.music.hardcore
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alt.music.prince
alt.music.u2
alt.rave
rec.music.newage



...including what's his name... Prince?

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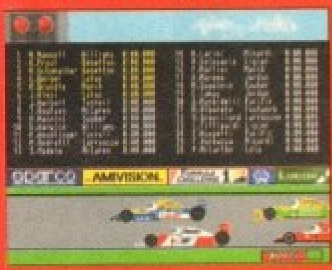
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# Wipe that smile off

AMOS

**Amos guru Phil South meditates on screen wipes.**

I've done screen wipes before I know, but easy to employ screen transitions, like a piece of lead pipe in your pocket in a dark alley, are comforting to have around.

These ideas are from J Haughey, who has supplied us with three wipe PROCs to get us going. I'd be interested to see some more of this type of PROC, as it's nice to have a little library of useful utils, especially ones which you use a lot.

So here we have three screen wipes, and this is number one. To demonstrate the PROC, we have to load a screen:

```
' *** Wipe1.AMOS
Load Iff "df0:anyscreen",0
```

Then we need to activate the PROC:

```
_LFADE1[0,1,4]
```

which we'll do like so for the sake of argument. Later down the program we define the PROC, which as in all Amos programs can be anywhere:

```
Procedure _LFADE1[SCR,DI,CO]
```

How do you use the procedure? Well the format is like so: _LFADE1[SCR,DI,CO], where SCR equals the number of the screen you want the effect to happen, and you have to make sure that the screen exists.

DI equals the effect type (for which you can use the numbers 1 to 5) and CO equals the ink colour you wish the screen to wipe to.

So having set the parameters of the wipe and called it, we have to code the wipe, which in this case goes like this. Set up the screen:

```
Screen SCR
SIX=Screen Width(SCR)-1 : SIY=Screen Height(SCR)-1
Ink CO,0
```

find out which effect you want and draw it to the screen:

```
If DI=1
For A=0 To SIY Step 2 : Draw 0,A To SIX,A : Next
For A=1 To SIY Step 2 : Draw 0,A To SIX,A : Next
End If
' Effect 2
End If
' Effect 3
If DI=3
For A=0 To SIY Step 2 : Draw 0,A To SIX,A : Next
For A=SIY-2 To 0 Step -2 : Draw 0,A To SIX,A :
Next
End If
' Effect 4
If DI=4
For A=SIY-2 To 0 Step -2 : Draw 0,A To SIX,A :
Next For A=0 To SIY Step 2 : Draw 0,A To SIX,A :
Next
End If
' Effect 5
If DI=5
For A=0 To SIY Step 2 : Draw 0,A To SIX,A : Draw
0,SIY-A+2 To SIX,SIY-A+2 : Next End If
End Proc
```

The wipe is a simple matter of drawing lines to the screen in the ink colour specified. Simple and looks good on screen, so it gets the thumbs up from me. Here is another one which takes the wipe from a different angle:







*Create a screen wipe like this or you may prefer a different outlook*

```
Procedure _HFADE1[SCR,DI,CO]
Screen SCR : Rem set screen
SIX=Screen Width(SCR)-1 : SIY=Screen
Height(SCR)-1 : Rem get screen details
Ink CO,0 : Rem set ink colour
' Effect 1
If DI=1
For A=0 To SIX Step 2 : Draw A,0 To A,SIY : Next
For A=1 To SIX Step 2 : Draw A,0 To A,SIY : Next
End If
' Effect 2
If DI=2
For A=SIX To 0 Step -2 : Draw A,0 To A,SIY :
Next For A=SIX-1 To 0 Step -2 : Draw A,0 To
A,SIY : Next
End If
' Effect 3
If DI=3
For A=0 To SIX Step 2 : Draw A,0 To A,SIY : Next
For A=SIX-2 To 0 Step -2 : Draw A,0 To A,SIY :
Next
End If
' Effect 4
If DI=4
For A=SIX-2 To 0 Step -2 : Draw A,0 To A,SIY :
Next For A=0 To SIX Step 2 : Draw A,0 To A,SIY :
Next
End If
' Effect 5
If DI=5
For A=0 To SIX Step 2 : Draw A,0 To A,SIY : Draw
SIX-A+2,0 To SIX-A+2,SIY : Next End If
End Proc
```

And finally, for a really rip snorting finish, yet another variation. The format this time is: _SFADE[SCR,DE], where SCR equals the number of the screen, and DE equals the delay.

So for example:

```
_SFADE[0,3]
```

will call the Colour Remove effect to work on screen number 0 using a delay of three. Suck it and see:

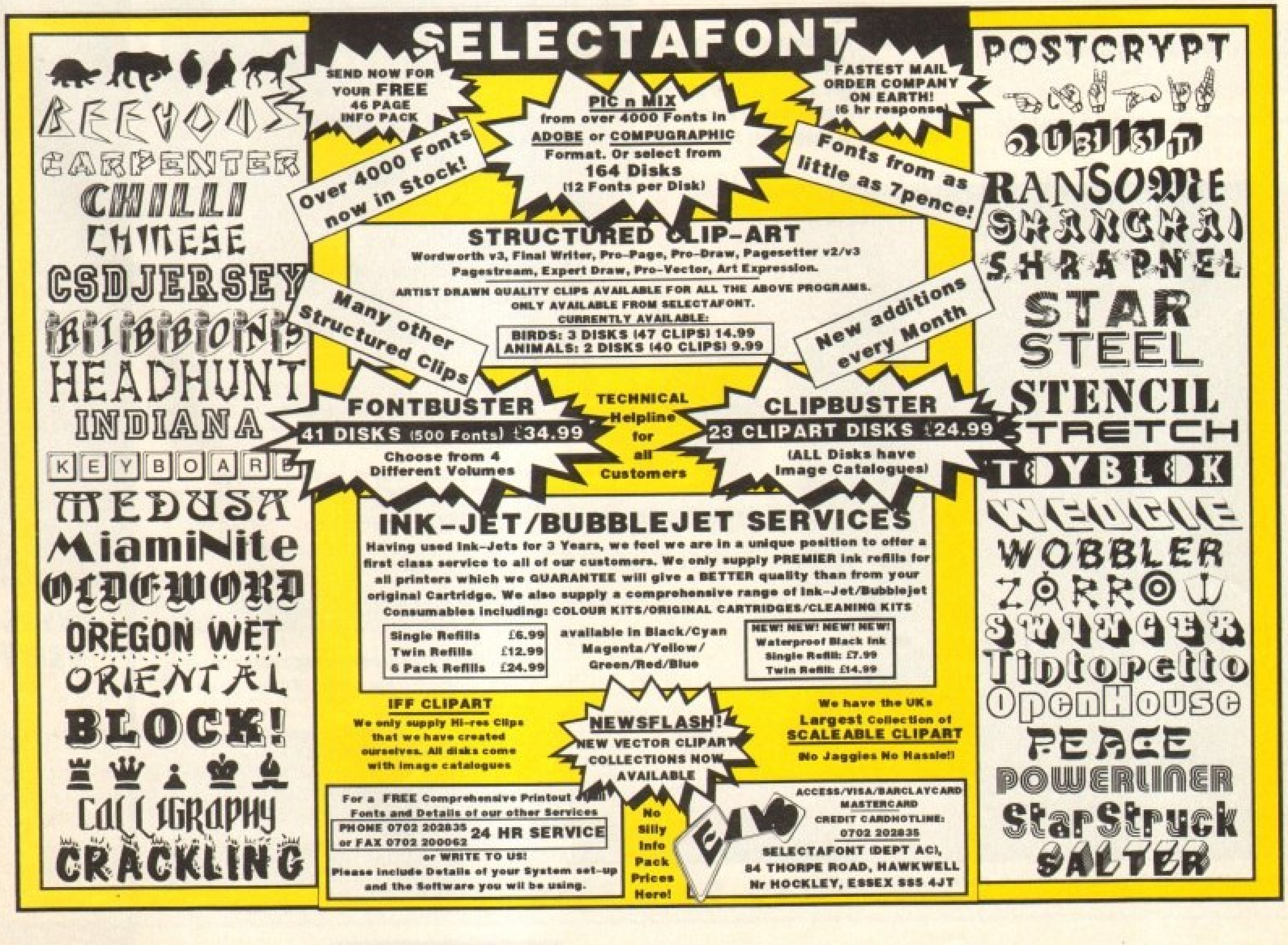
```
Procedure _SFADE[SCR,DE]
Screen SCR : Rem set screen
NC=Screen Colour-1
For A=0 To NC
Colour A,0
If DE>0 Then Wait DE
Next
End Proc
```

## Write stuff

If you have an Amos question, or a routine you'd like to share with the world, then please write to Phil South, AMOS Column, Amiga Computing, Europa House, Adlington Park, Macclesfield, SK10 4NP.

# AMIGA COMPUTING ADVERTISERS' INDEX





# Bit of a bind

Pages falling out of documents is a familiar story. Ben Pointer shows you how to prevent it



Binding is important. A brilliantly laid out document can be ruined by unsuitable binding. Obvious example – a document which is intended for reference, where readers are going to want the document to remain open while using both of their hands to follow instructions.

Use a binding that won't let the document remain open and you will annoy your readers. So you have to choose a suitable binding.

The cheapest method of binding is called side-stabbing. You place the pages in order, one on top of the other, then drive wire staples through the left-hand side.

Although cheap and easy, it is a crude method which does not allow the document to be opened easily, nor to remain open. Only use this method if, because of time or costs, there really is no other option.

Rather than side-stab your document, it's better to use plastic grip binders which cost a little more than staples but are just as easy. Most big stationers sell them.

However, do keep in mind that like side-stabbing, plastic grip binders do not allow documents to be opened easily, nor to stay open, plus there is the added disadvantage that if opened very quickly the grip may well fly off at great speed.

The most widespread method of binding and also one of the least costly methods is called saddle-stitch. Here, pairs of pages are printed together on the same sheet. All the sheets are collated, folded in half, and then they are either stitched or wire-stapled together down the fold.

Provided they do not contain too many pages, with a bit of pressure down the fold saddle-stitched documents can usually be opened flat and persuaded to remain open at a certain page.

The smaller the format, the fewer pages you can have before the fold gets the upper hand. While a 48-page, A4 format, saddle-stitched document may be persuaded to remain open, an A5 format document of that size would want to close. (Ask Isaac Newton if you want to know why.)

For binding purposes, the pairs of pages have to be printed in a certain order. The exact layout of the pages depends on how many pages fit on to the sheet, but the rule of thumb is that the page numbers of "facing" pages always add up to one more page than there is in the document.

So for a four-page document, page one and four (=five) are a pair (page 1 being the cover), and page two and three (=five) are a pair. If you are providing your artwork to the printers as single pages, then let the printers worry about this, but do ensure that your pagination (page numbering) is correct.

Keep in mind that saddle-stitched documents have to be made up of multiples of four pages.



***Two kinds of binding equipment, one is capable of stitching 40,000 copies per hour, the other one is not!***

You can't have a nine-page document saddle-stitched, it would have to have three blank pages to make it 12.

Most printers prefer to work in multiples of eight, so think about this before you design and lay out your document.

Saddle-stitched documents will also need trimming down the non-stitched length, as the pages in the centre will poke out further than those nearer the covers.

## DESIGN

Bear this in mind when designing your pages. It depends on the thickness of the paper, but in a 64-page (32-sheet) document the trim can be as much as 5mm left and right with standard 80 gsm bond paper.

And that size – 64 pages – is about as big as you can go with saddle-stitch without getting an ugly bulge at the fold. You may be able to push it to 96 pages (48 sheets) if the paper isn't too thick, but any bigger than this and you'll either have to have the document stitched in sections and use the cover to bind the sections (hardback books are normally bound in this way, it's not cheap), or choose another method of binding.

Wire or plastic binding is very popular these days. Many offices have a machine for binding reports and so on in this way. Holes are punched along the left-hand edge of sheets and a wire or plastic clasp is meshed into the holes. For documents that need to lie flat, wire or plastic binding is perfect.

The main disadvantage, apart from the cost if you use wire (even more for plastic-coated wire), is that documents bound in this way are not easy to store because the binding is wider than the publication.

Also, packed on to a bookshelf, wire bindings can get entwined. A solution to this problem is a special type of cover which almost completely covers the wires, but, because of the special equipment needed, this is among the most expensive methods of binding.

Lastly, there are ring binders. Two or four holes are punched down the left-hand side of pages, and these are then threaded on to a fitting in the ring binder.

It is simple, but the ring binders themselves can be expensive. They don't get much cheaper than about £2 each unless you buy in vast quantities. But if your document needs to be regularly updated, and/or needs to lie flat and stay open, ring binders are the best solution.

The only disadvantage, apart from cost, is that the pages can wear at the holes if the document is used regularly. If you do choose ring binders, choose ones that suit the size of the document – there's nothing worse than having half-a-dozen pages flapping about in a binder designed to take hundreds.

## Complete perfection

Perfect binding is the neatest method. It is how this magazine is bound. Single pages – or single sheets of eight or 16 pages folded in a special way (called sections), later sliced along the folds – are clamped tightly together and a thin layer of glue is applied along the spine.

Perfect binding costs a bit more than saddle-stitched, but the results are much neater. It is possible to "break" the binding by folding the document back on itself, in which case pages are liable to drop out, but on the whole perfect binding is good for anything over 32-pages that doesn't have to lie flat and remain open.

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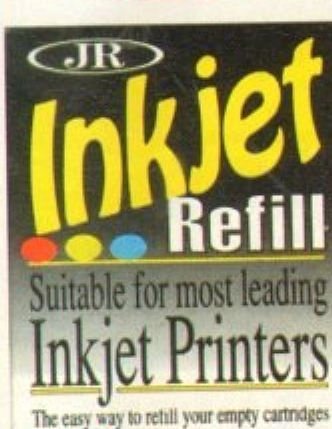



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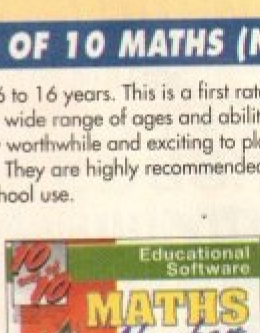

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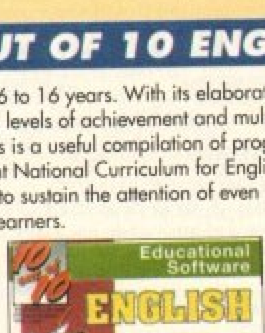



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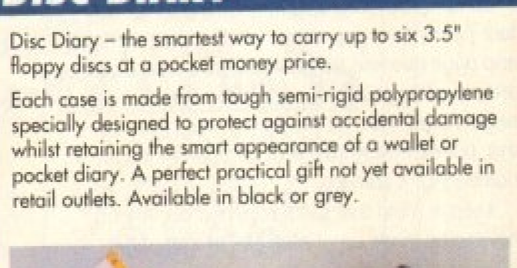

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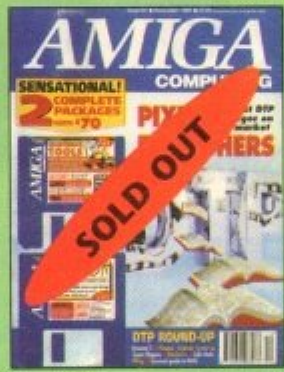
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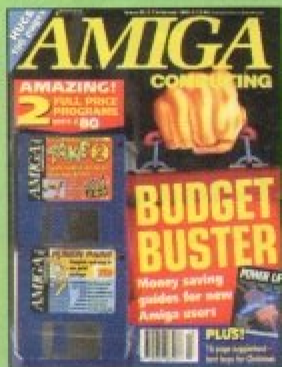

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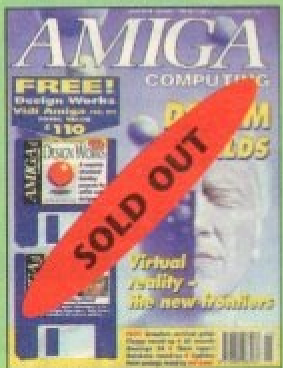

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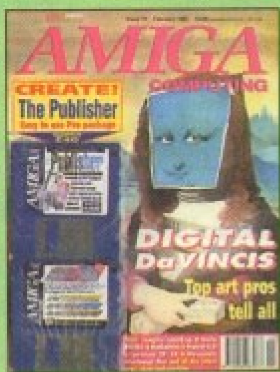

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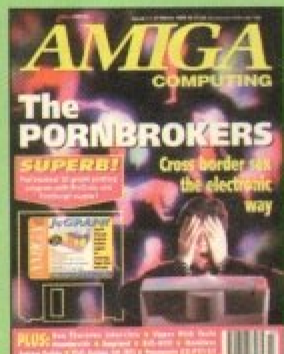

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## FEBRUARY



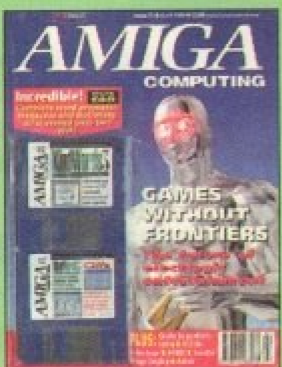

Amigas in the movies. Round-up of sound samplers and flight simulators. Reviews of Wavetools, I-Card, Protext v6.0, Star SJ144, TrapFax, Syndesis and Spectrum 28
***ON 2 DISKS:*** The Publisher and MRBackup Professional VALUED at £40.

## MARCH




A look behind Babylon 5, PC and Mac emulation and a survival guide to monitors. Reviews of Vidi Amiga 24 RT, Humanoids, BJ600 and A2A.
***ON DISK:*** JcGraph

## APRIL



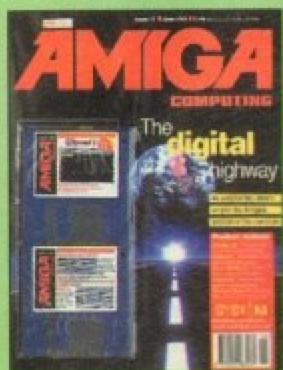

The future of computer games explored. What will they look like in ten years? Also, reviews of Helm, AMax Mac emulator, A1230+ accelerator, Tocatta 16-bit sound card, and A4091 SCSI-II card.
***ON 2 DISKS:*** KindWords 3, a complete wysiwyg word processor with dictionary and thesaurus.

## MAY



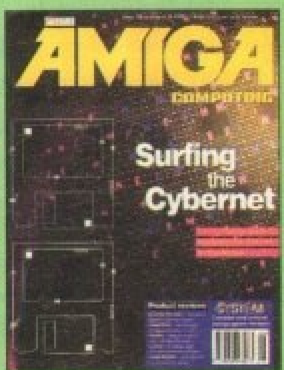

Can Commodore survive and take the Amiga forward. We look at the Amiga market as a whole. Plus: reviews of TBC Plus, Wordworth 3.0, Multiframe, Videostage Pro, and the ACE marketing initiative.
***ON 2 DISKS:*** Personal Fonts Maker for creating your own custom fonts, Legacy of Sorasil complete playable level, and Epoch Master, a superb personal organiser.

## JUNE



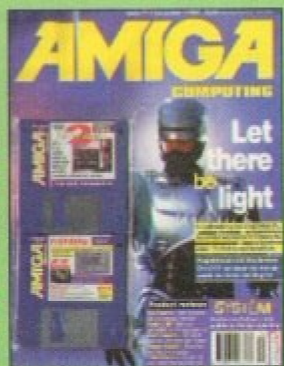

The information highway and where the Amiga fits in. Is the super-highway just a lot of hype? Plus: reviews of Final Writer 2, Distant Suns 5, Studio 16 latest sampling software
***ON 2 DISKS:*** K-Spread 2 full commercial spreadsheet program, plus Virus Checker 6.34 and Sysinfo.

## AUGUST




How to survive and master the Internet. Plus: reviews of A1230 Turbo, ClariSSA the animator package, the Tabby graphics tablet and Liana.
***ON 2 DISKS:*** Devpac v2 plus demo of 10 out of 10's French Tutor.

## SEPTEMBER




An exclusive preview of the new stand-alone Lightwave PAL, plus all its essential add-ons. A first look at PageStream 3.0. Retina III, MainActor and a DIY guide to building a home studio.
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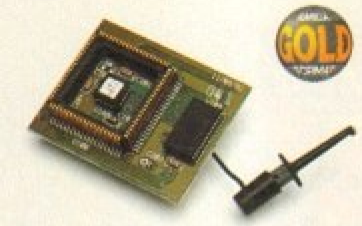
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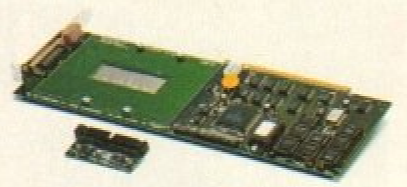
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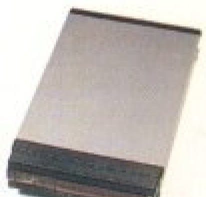
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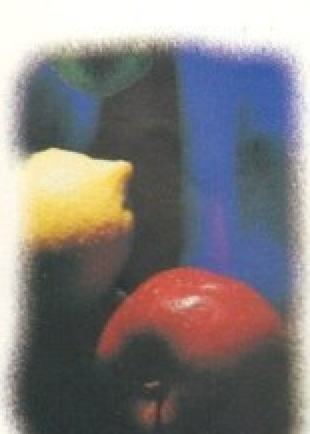


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